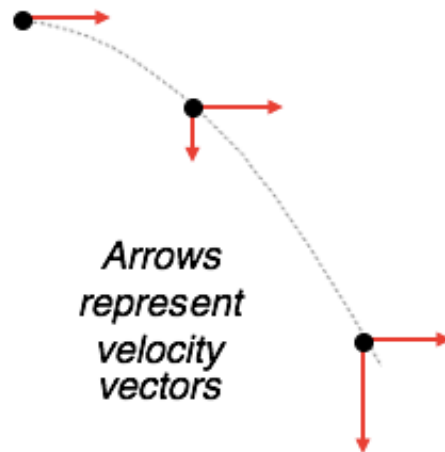


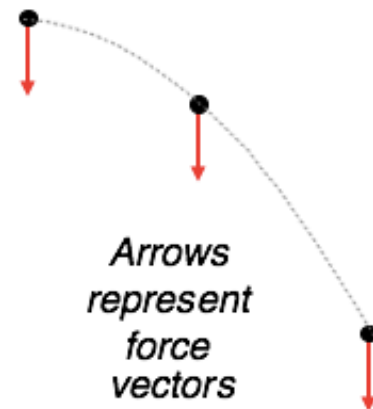
Question 1:

One of these representations is not like the others. Which one doesn't belong?



"The object's vertical acceleration changes by -9.8 m/s every second."

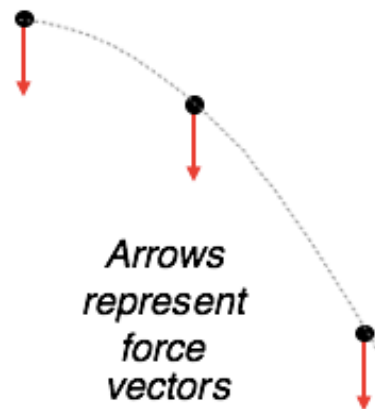
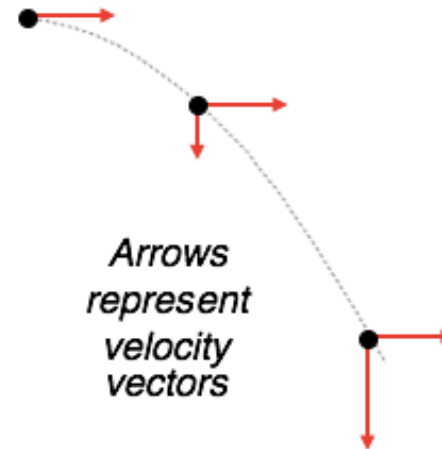
t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	0.0
1.0	8.0	-9.8
2.0	8.0	-19.6
3.0	8.0	-29.4
4.0	8.0	-39.2



Question 2:

One of these representations is not like the others. Which one doesn't belong?

**"The object's
vertical
acceleration
changes by -9.8
m/s every
second."**

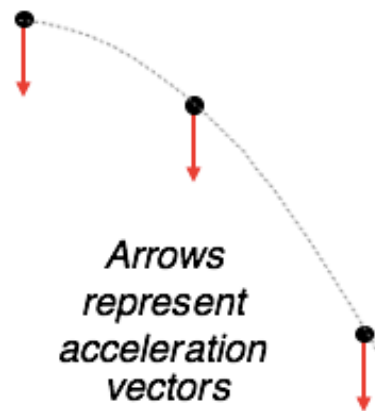
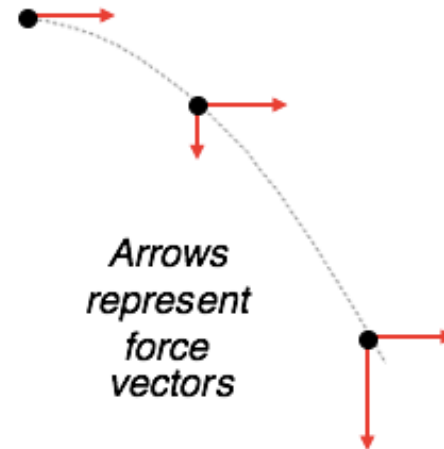


t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	0.0
1.0	8.0	-9.8
2.0	8.0	-19.6
3.0	8.0	-29.4
4.0	8.0	-39.2

Question 3:

One of these representations is not like the others. Which one doesn't belong?

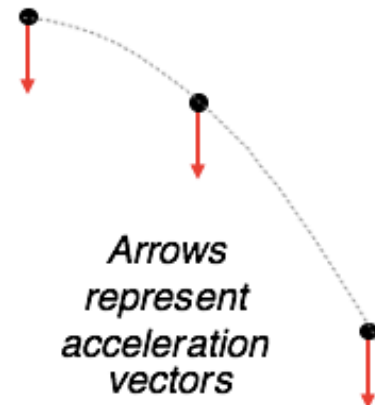
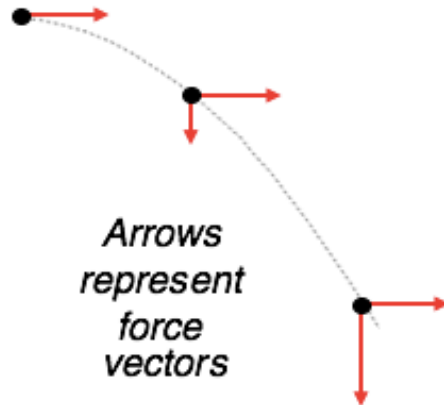
**"The object's
horizontal
velocity is
constant; it's
vertical velocity
is changing."**



t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	0.0
1.0	8.0	-9.8
2.0	8.0	-19.6
3.0	8.0	-29.4
4.0	8.0	-39.2

Question 4:

One of these representations is not like the others. Which one doesn't belong?

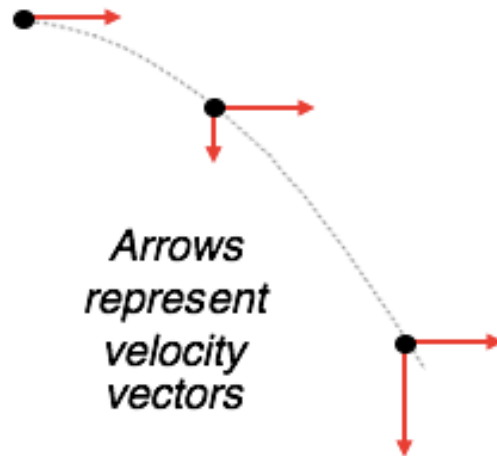


"The object's horizontal velocity is constant; it's vertical velocity is changing."

t (s)	v_x (m/s)	v_y (m/s)
0.0	8.0	0.0
1.0	8.0	-9.8
2.0	8.0	-19.6
3.0	8.0	-29.4
4.0	8.0	-39.2

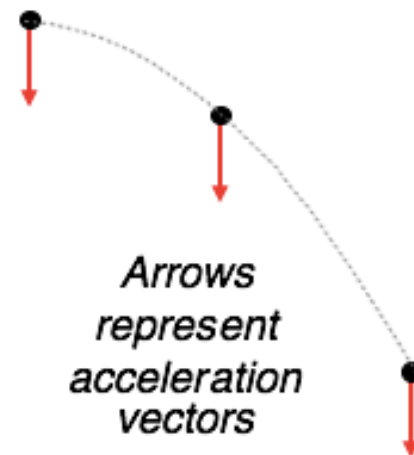
Question 5:

One of these representations is not like the others. Which one doesn't belong?



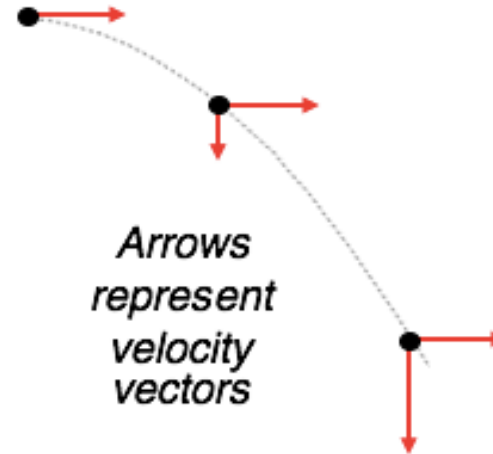
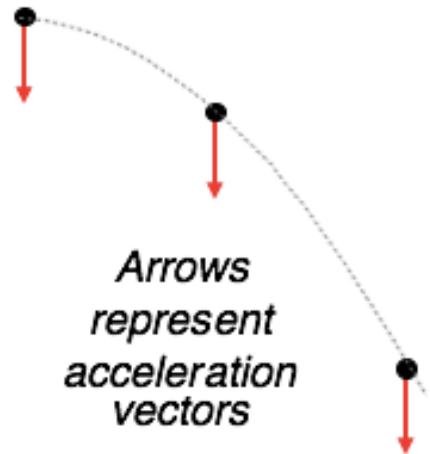
"The object's vertical acceleration is increasing as it falls."

t (s)	a_x (m/s ²)	a_y (m/s ²)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8



Question 6:

One of these representations is not like the others. Which one doesn't belong?

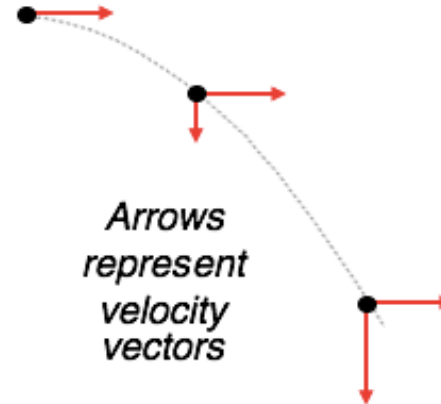
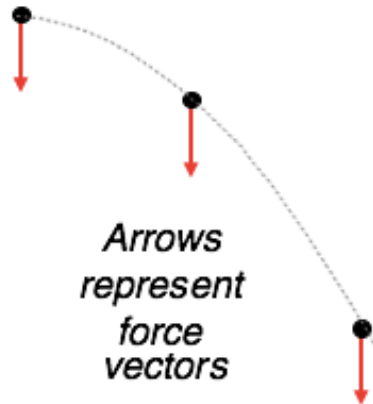


t (s)	a_x (m/s ²)	a_y (m/s ²)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8

**"The object's
vertical
acceleration is
increasing as it
falls."**

Question 7:

One of these representations is not like the others. Which one doesn't belong?



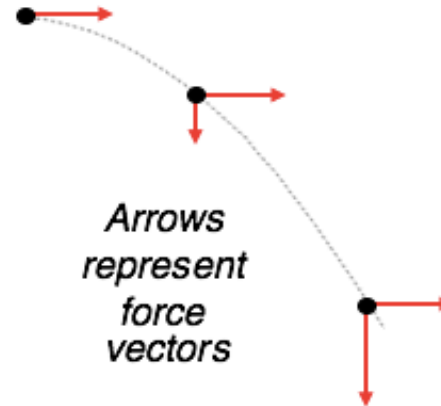
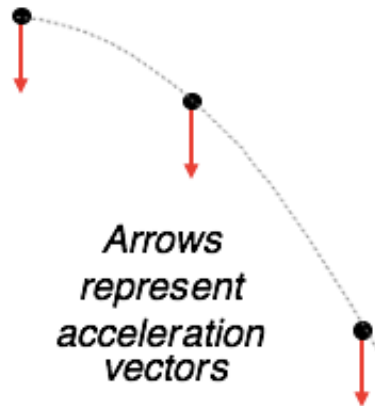
t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	-9.8
1.0	12.0	-9.8
2.0	12.0	-9.8
3.0	12.0	-9.8
4.0	12.0	-9.8

"The object's horizontal velocity is constant; it's vertical velocity is changing."

Question 8:

One of these representations is not like the others. Which one doesn't belong?

6

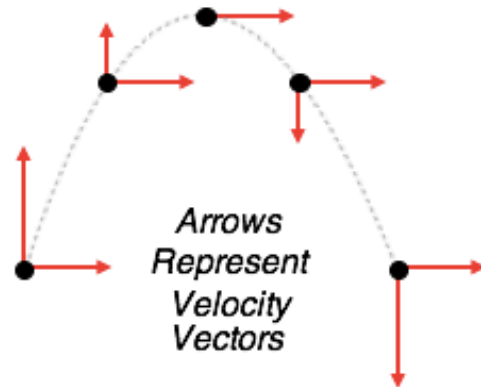


t (s)	V_x (m/s)	V_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

"The object's horizontal velocity is constant; it's vertical velocity is changing."

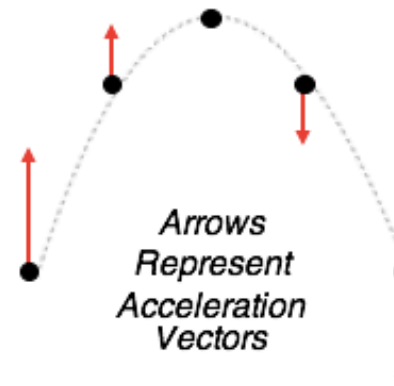
Question 9:

One of these representations is not like the others. Which one doesn't belong?



t (s)	V_x (m/s)	V_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

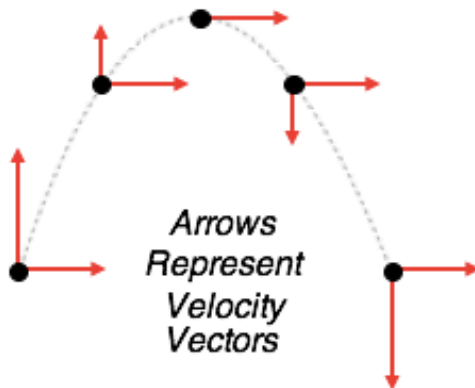
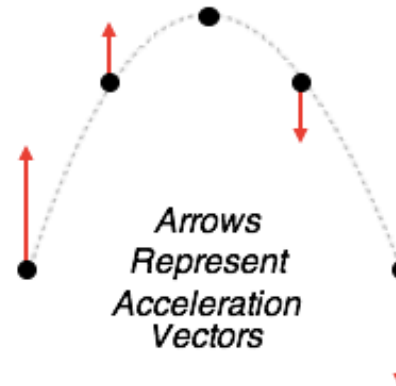
"The time to rise to the peak location equals the time to fall from the peak location."



Question 10:

One of these representations is not like the others. Which one doesn't belong?

**"The time to rise
to the peak
location equals
the time to fall
from the peak
location."**

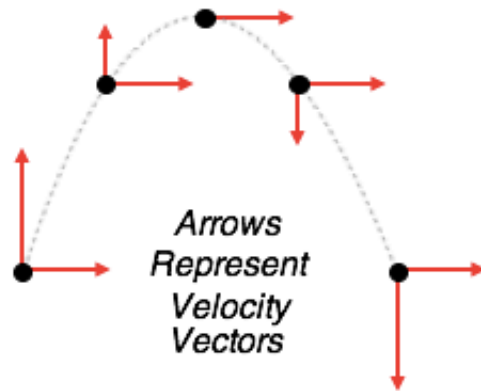
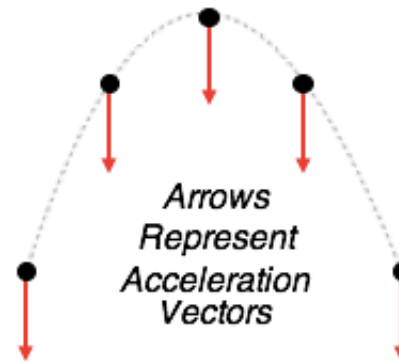


t (s)	V_x (m/s)	V_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

Question 11:

One of these representations is not like the others. Which one doesn't belong?

"The projectile has a zero velocity at the highest location."

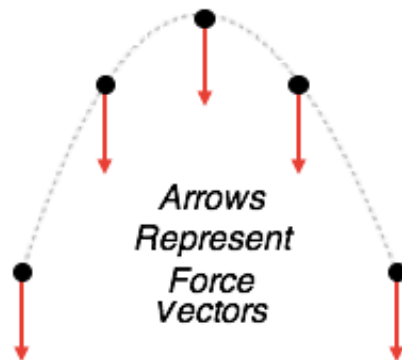
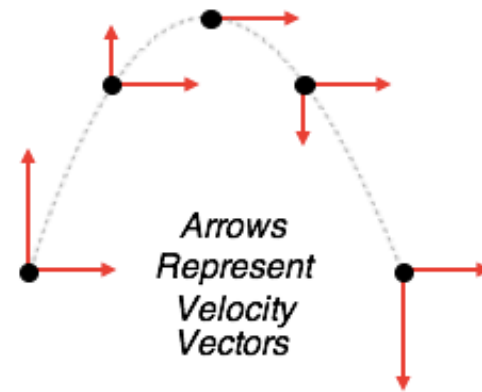


t (s)	V_x (m/s)	V_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

Question 12:

One of these representations is not like the others. Which one doesn't belong?

t (s)	V_x (m/s)	V_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6



"The projectile has a zero velocity at the highest location."

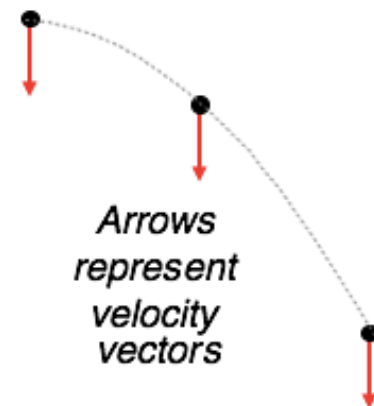
Question 13:

One of these representations is not like the others. Which one doesn't belong?

t (s)	V_x (m/s)	V_y (m/s)
0.0	16.0	0.0
1.0	16.0	-9.8
2.0	16.0	-19.6
3.0	16.0	-29.4
4.0	16.0	-39.2

**"The object's
acceleration is
directed
downward."**

**"The object's
horizontal
velocity is
constant; it's
vertical velocity
is changing."**



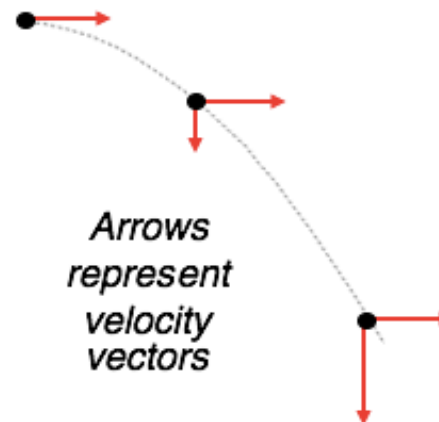
Question 14:

One of these representations is not like the others. Which one doesn't belong?

t (s)	V_x (m/s)	V_y (m/s)
0.0	16.0	0.0
1.0	16.0	-9.8
2.0	16.0	-19.6
3.0	16.0	-29.4
4.0	16.0	-39.2

**"The object's
vertical
acceleration
changes by -9.8
m/s every
second."**

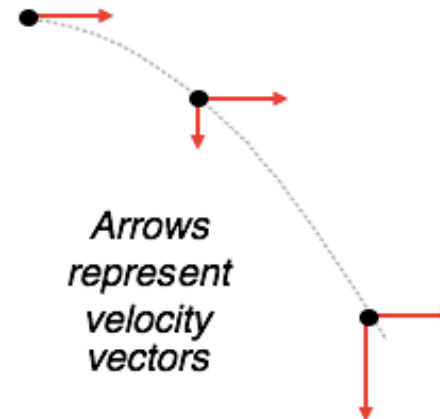
**"The object's
horizontal
velocity is
constant; it's
vertical velocity
is changing."**



Question 15:

One of these representations is not like the others. Which one doesn't belong?

**"The object's
vertical
acceleration
changes by -9.8
m/s every
second."**

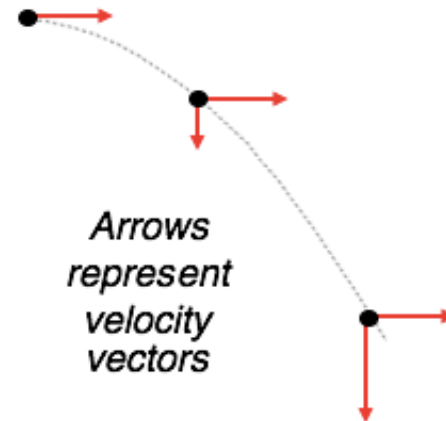
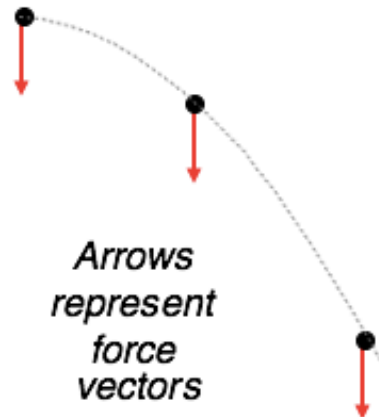


**"The object's
horizontal
velocity is
constant; it's
vertical velocity
is changing."**

t (s)	v_x (m/s)	v_y (m/s)
0.0	16.0	0.0
1.0	16.0	-9.8
2.0	16.0	-19.6
3.0	16.0	-29.4
4.0	16.0	-39.2

Question 16:

One of these representations is not like the others. Which one doesn't belong?

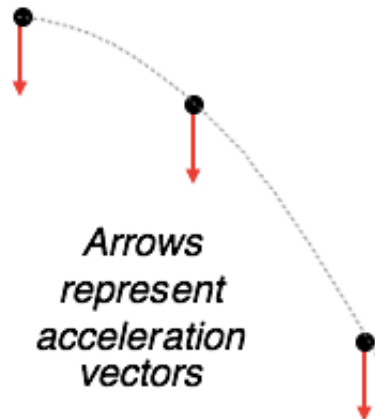


"The object's horizontal velocity is constant; it's vertical velocity is changing."

t (s)	v_x (m/s)	v_y (m/s)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8

Question 17:

One of these representations is not like the others. Which one doesn't belong?



t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

"The object's vertical velocity changes by the same amount every second."

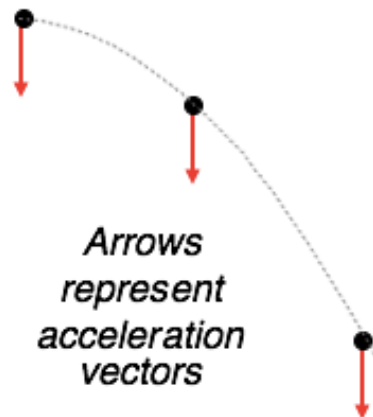
t (s)	v_x (m/s)	v_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8

Question 18:

One of these representations is not like the others. Which one doesn't belong?

t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

t (s)	v_x (m/s)	v_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8



"The object's vertical velocity changes by the same amount every second."

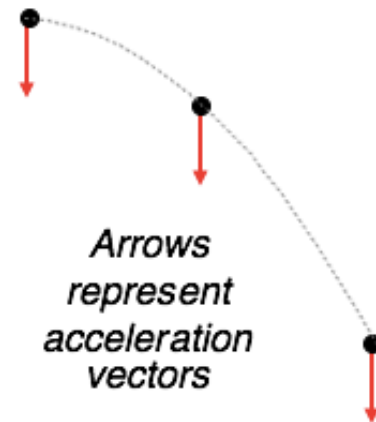
Question 19:

One of these representations is not like the others. Which one doesn't belong?

t (s)	v_x (m/s)	v_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8

**"The object's
vertical velocity
changes by the
same amount
every second."**

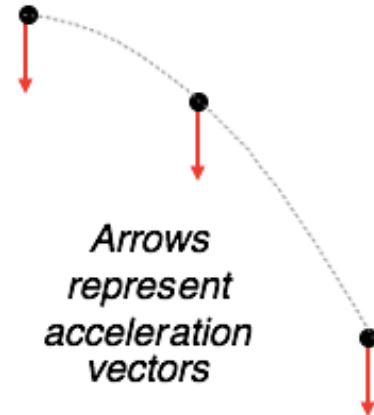
t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4



Question 20:

One of these representations is not like the others. Which one doesn't belong?

"The object's vertical velocity changes by the same amount every second."



t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

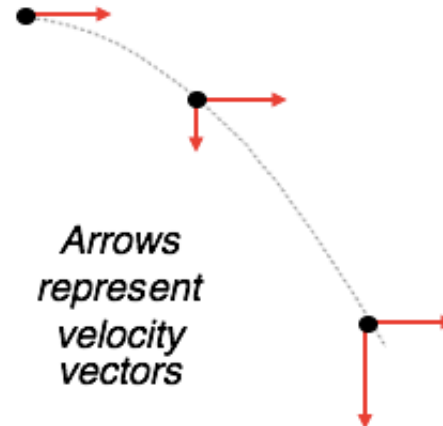
t (s)	v_x (m/s)	v_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8

Question 21:

One of these representations is not like the others. Which one doesn't belong?

t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

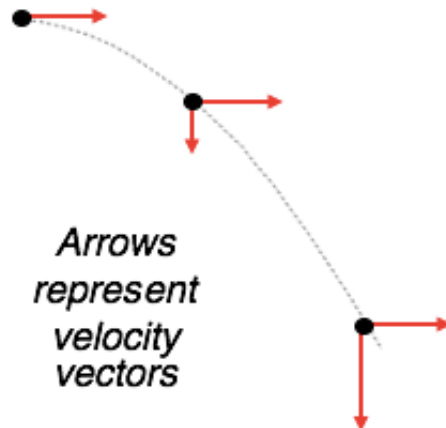
t (s)	d_x (m)	d_y (m)
0.0	12.0	-9.8
1.0	12.0	-9.8
2.0	12.0	-9.8
3.0	12.0	-9.8
4.0	12.0	-9.8



"The object covers the same horizontal distance every second."

Question 22:

One of these representations is not like the others. Which one doesn't belong?



t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

"The object covers the same horizontal distance every second."

t (s)	d_x (m)	d_y (m)
0.0	12.0	-9.8
1.0	12.0	-9.8
2.0	12.0	-9.8
3.0	12.0	-9.8
4.0	12.0	-9.8

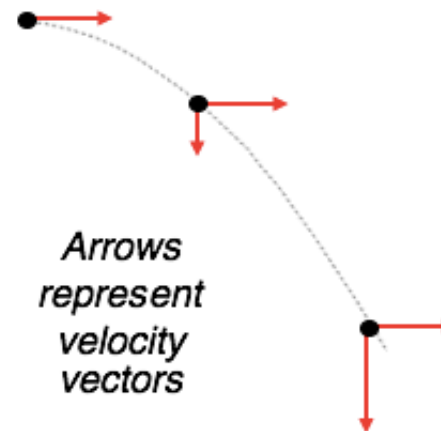
Question 23:

One of these representations is not like the others. Which one doesn't belong?

t (s)	d_x (m)	d_y (m)
0.0	12.0	-9.8
1.0	12.0	-9.8
2.0	12.0	-9.8
3.0	12.0	-9.8
4.0	12.0	-9.8

t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

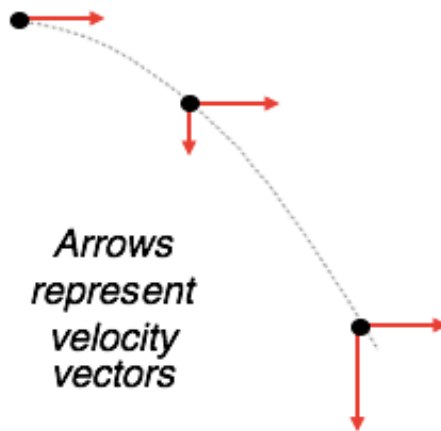
"The object covers the same horizontal distance every second."



Question 24:

One of these representations is not like the others. Which one doesn't belong?

"The object covers the same horizontal distance every second."

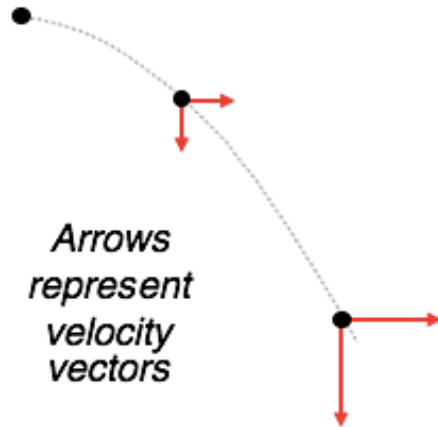


t (s)	d_x (m)	d_y (m)
0.0	12.0	-9.8
1.0	12.0	-9.8
2.0	12.0	-9.8
3.0	12.0	-9.8
4.0	12.0	-9.8

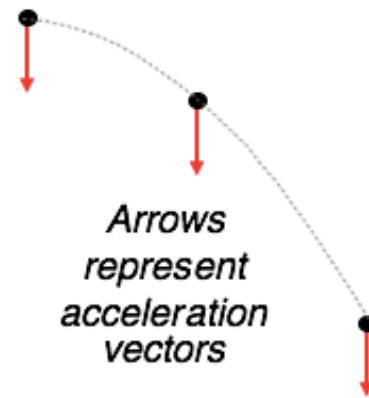
t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

Question 25:

One of these representations is not like the others. Which one doesn't belong?



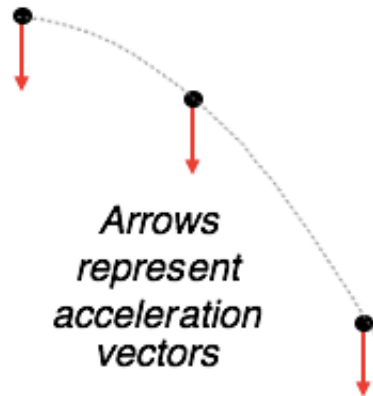
t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4



t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

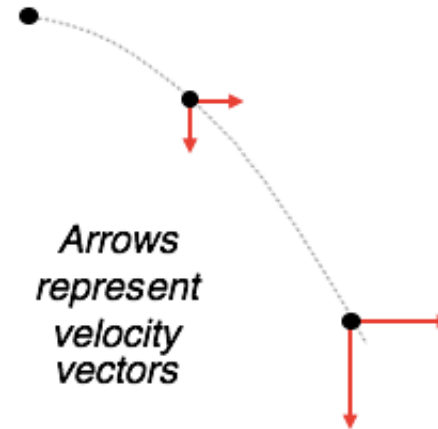
Question 26:

One of these representations is not like the others. Which one doesn't belong?



*Arrows
represent
acceleration
vectors*

t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

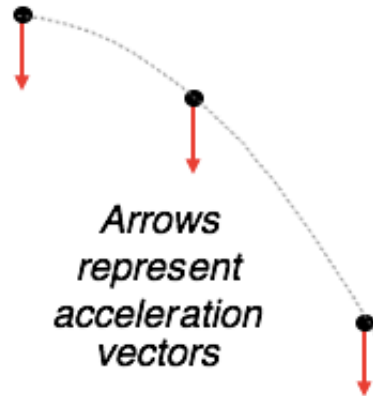


*Arrows
represent
velocity
vectors*

t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

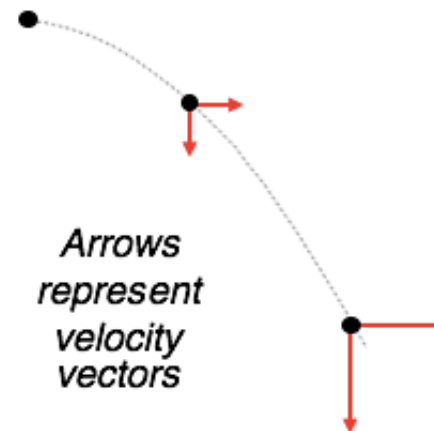
Question 27:

One of these representations is not like the others. Which one doesn't belong?



t (s)	V_x (m/s)	V_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

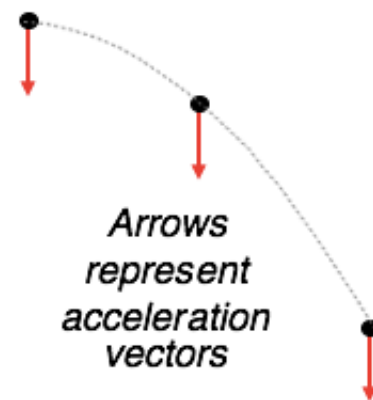
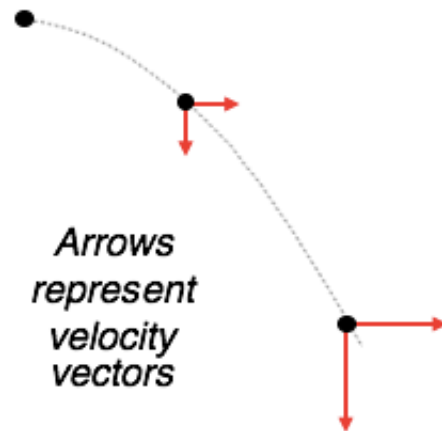


Question 28:

One of these representations is not like the others. Which one doesn't belong?

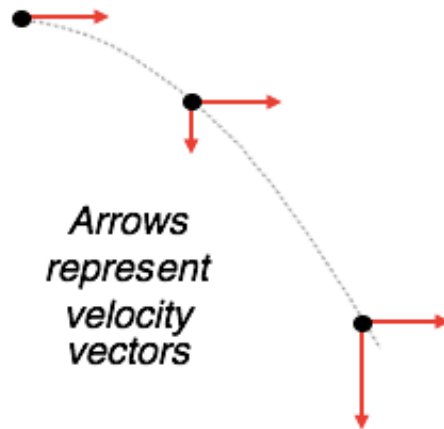
t (s)	d_x (m)	d_y (m)
0.0	0.0	0
1.0	8.0	-4.9
2.0	16.0	-19.6
3.0	24.0	-44.1
4.0	32.0	-78.4

t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2



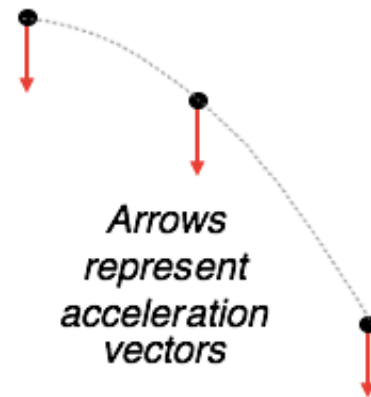
Question 29:

One of these representations is not like the others. Which one doesn't belong?



t (s)	V_x (m/s)	V_y (m/s)
0.0	0.0	0.0
1.0	16.0	-9.8
2.0	32.0	-19.6
3.0	48.0	-29.4
4.0	64.0	-39.2

"The object covers the same horizontal distance every second."

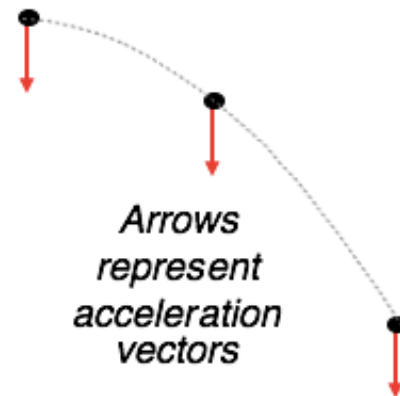
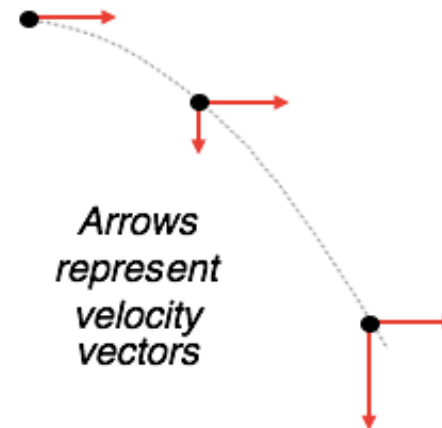


Question 30:

One of these representations is not like the others. Which one doesn't belong?

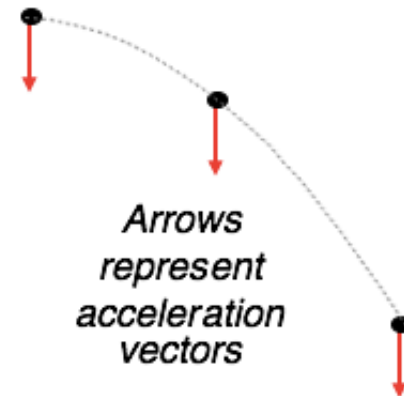
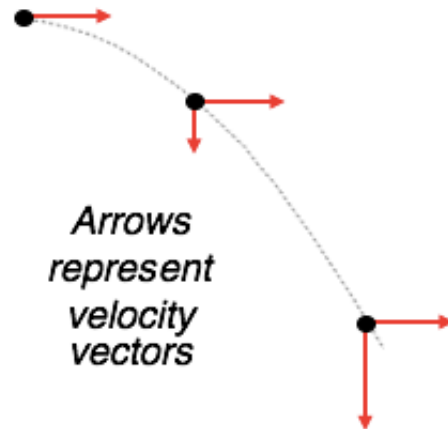
t (s)	V_x (m/s)	V_y (m/s)
0.0	0.0	0.0
1.0	16.0	-9.8
2.0	32.0	-19.6
3.0	48.0	-29.4
4.0	64.0	-39.2

"The object covers the same horizontal distance every second."



Question 31:

One of these representations is not like the others. Which one doesn't belong?

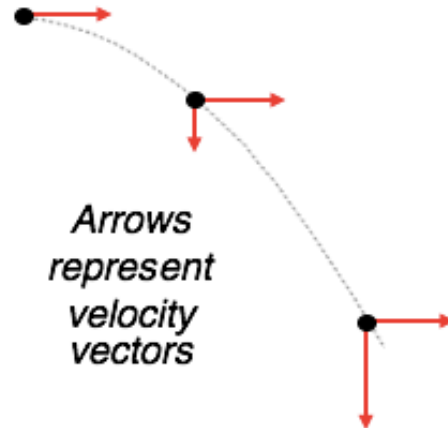


t (s)	V_x (m/s)	V_y (m/s)
0.0	0.0	0.0
1.0	16.0	-9.8
2.0	32.0	-19.6
3.0	48.0	-29.4
4.0	64.0	-39.2

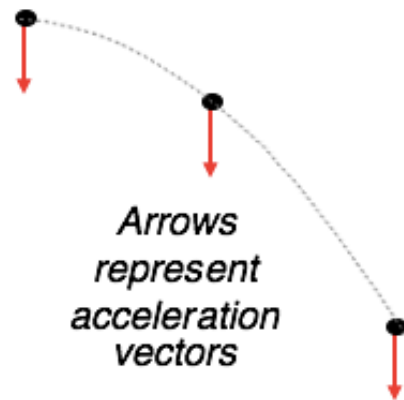
"The object covers the same horizontal distance every second."

Question 32:

One of these representations is not like the others. Which one doesn't belong?



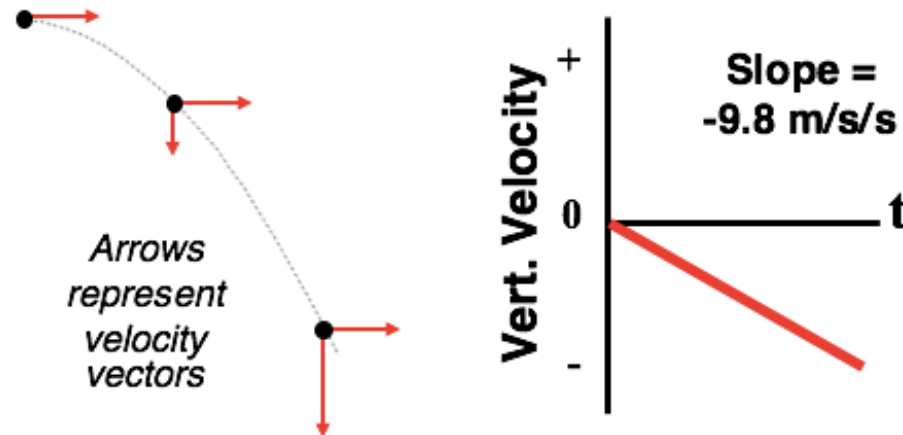
**"The object
covers the
same horizontal
distance every
second."**



t (s)	v_x (m/s)	v_y (m/s)
0.0	0.0	0.0
1.0	16.0	-9.8
2.0	32.0	-19.6
3.0	48.0	-29.4
4.0	64.0	-39.2

Question 33:

One of these representations is not like the others. Which one doesn't belong?



"The vertical velocity changes by -9.8 m/s every second."

t (s)	d_x (m)	d_y (m)
0.0	0.0	0.0
1.0	12.0	-9.8
2.0	24.0	-19.6
3.0	36.0	-29.4
4.0	48.0	-39.2

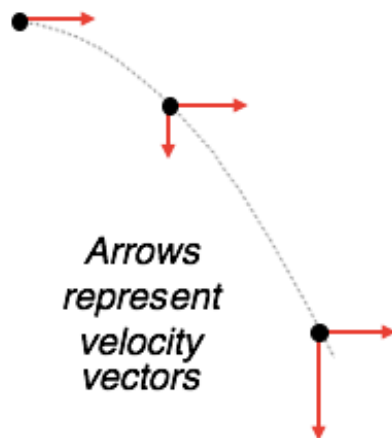
"The object's horizontal velocity remains the same throughout its motion."

Question 34

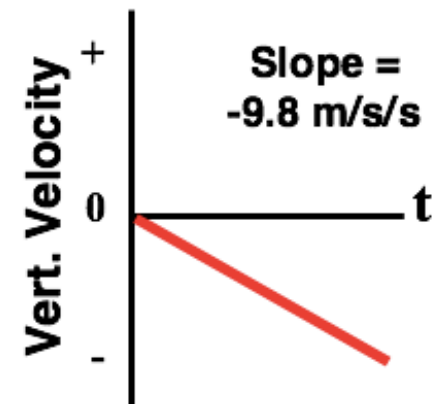
One of these representations is not like the others. Which one doesn't belong?

"The vertical velocity changes by -9.8 m/s every second."

"The object's horizontal velocity remains the same throughout its motion."



t (s)	d_x (m)	d_y (m)
0.0	0.0	0.0
1.0	12.0	-9.8
2.0	24.0	-19.6
3.0	36.0	-29.4
4.0	48.0	-39.2

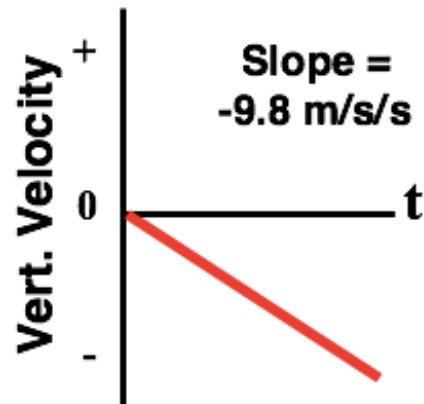


Question 35

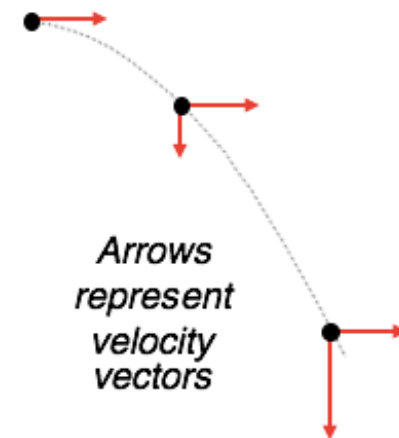
One of these representations is not like the others. Which one doesn't belong?

"The object's horizontal velocity remains the same throughout its motion."

"The vertical velocity changes by -9.8 m/s every second."

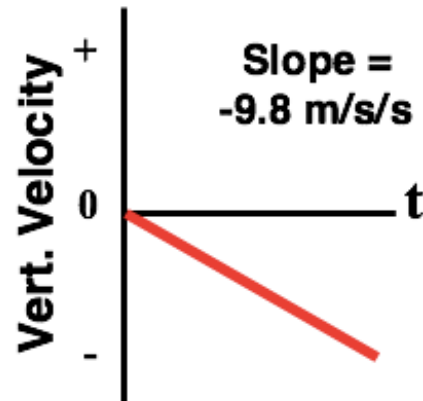


t (s)	d _x (m)	d _y (m)
0.0	0.0	0.0
1.0	12.0	-9.8
2.0	24.0	-19.6
3.0	36.0	-29.4
4.0	48.0	-39.2

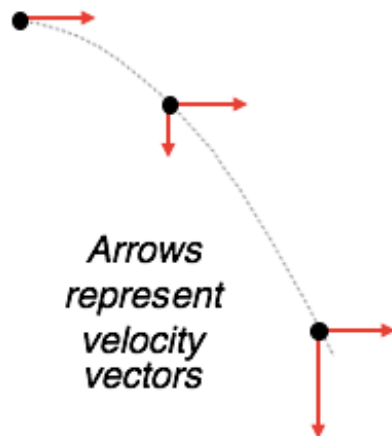


Question 36

One of these representations is not like the others. Which one doesn't belong?



"The object's horizontal velocity remains the same throughout its motion."



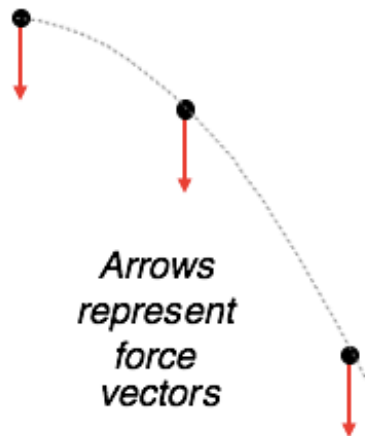
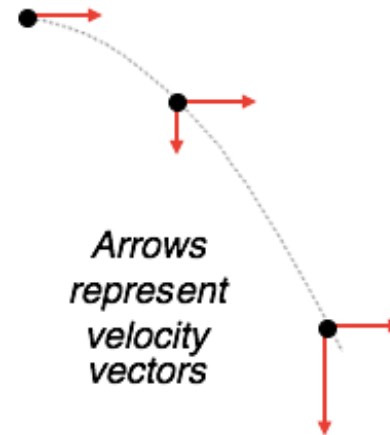
t (s)	d _x (m)	d _y (m)
0.0	0.0	0.0
1.0	12.0	-9.8
2.0	24.0	-19.6
3.0	36.0	-29.4
4.0	48.0	-39.2

"The vertical velocity changes by -9.8 m/s every second."

Question 37

One of these representations is not like the others. Which one doesn't belong?

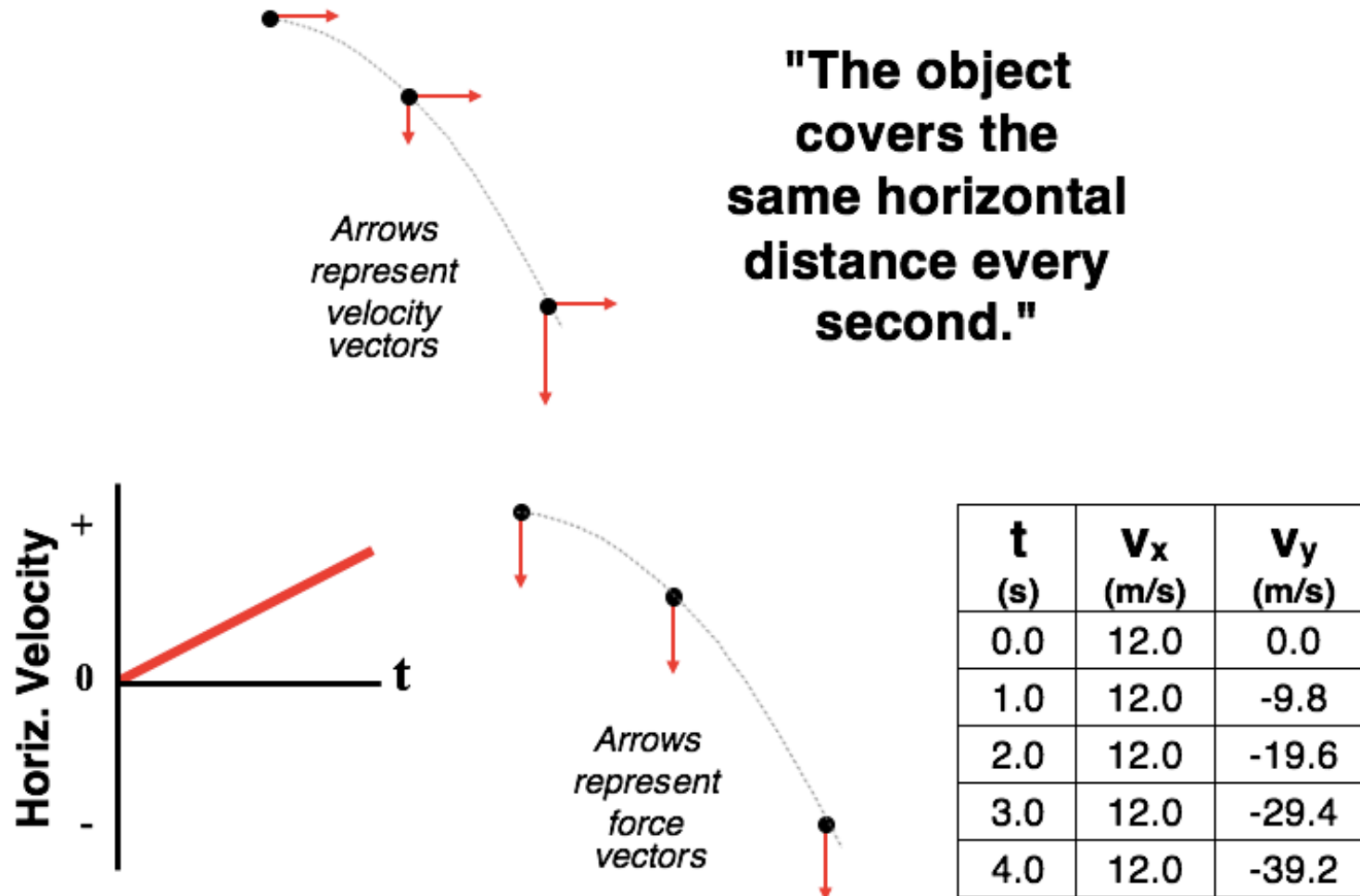
"The object covers the same horizontal distance every second."



t (s)	V_x (m/s)	V_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

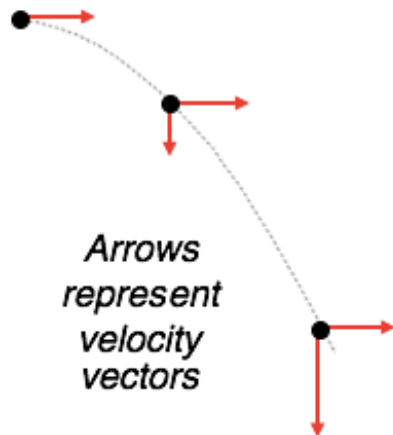
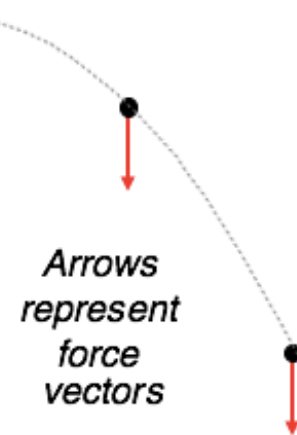
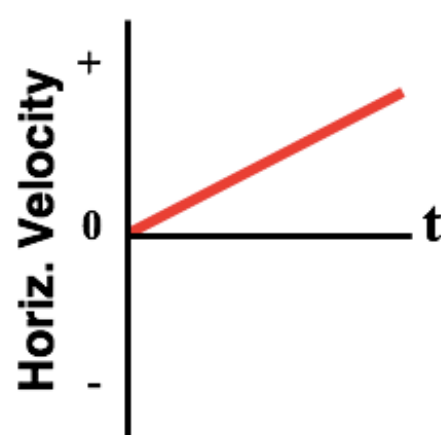
Question 38

One of these representations is not like the others. Which one doesn't belong?



Question 39

One of these representations is not like the others. Which one doesn't belong?

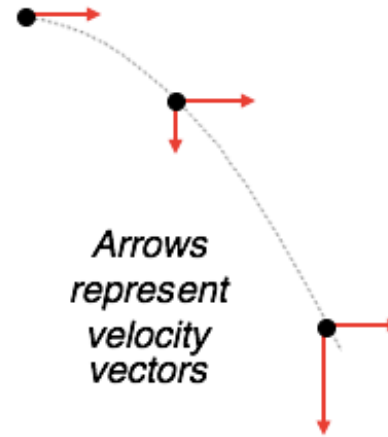
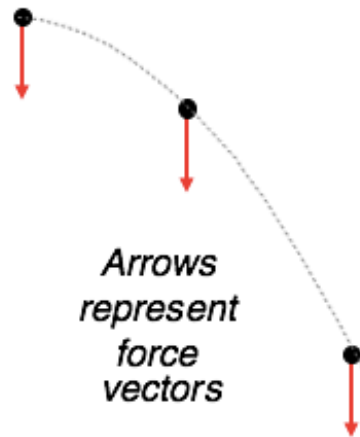


"The object covers the same horizontal distance every second."

t (s)	V_x (m/s)	V_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

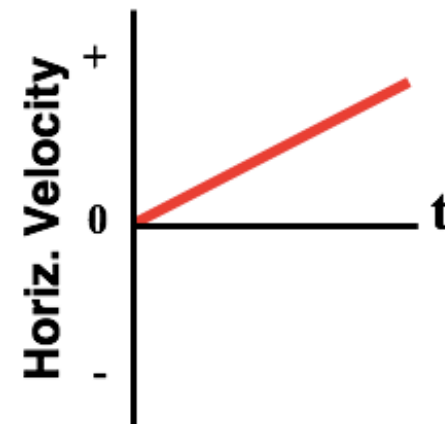
Question 40

One of these representations is not like the others. Which one doesn't belong?



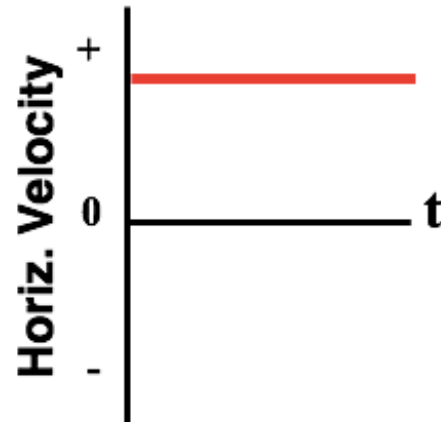
"The object covers the same horizontal distance every second."

t (s)	v_x (m/s)	v_y (m/s)
0.0	12.0	0.0
1.0	12.0	-9.8
2.0	12.0	-19.6
3.0	12.0	-29.4
4.0	12.0	-39.2

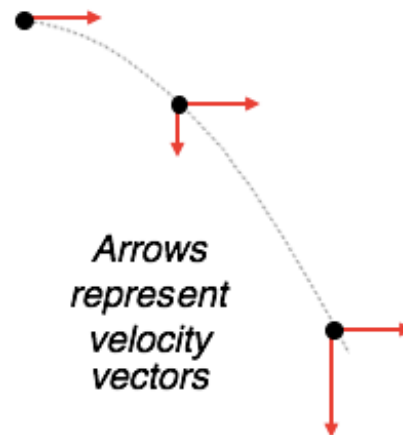
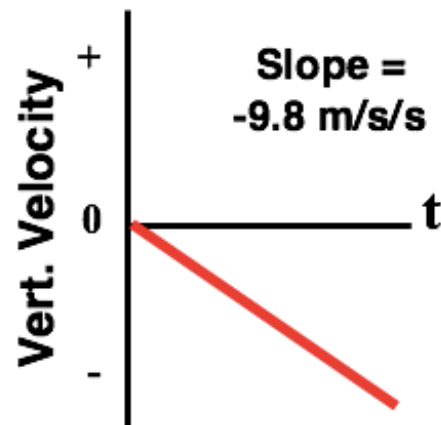


Question 41

One of these representations is not like the others. Which one doesn't belong?



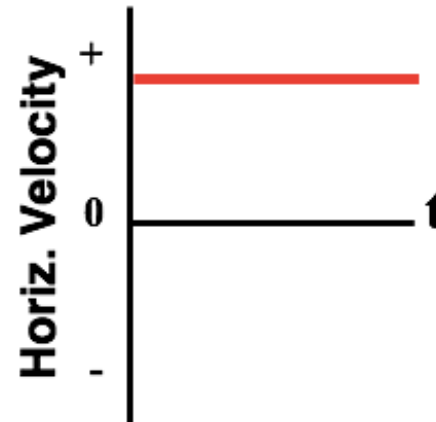
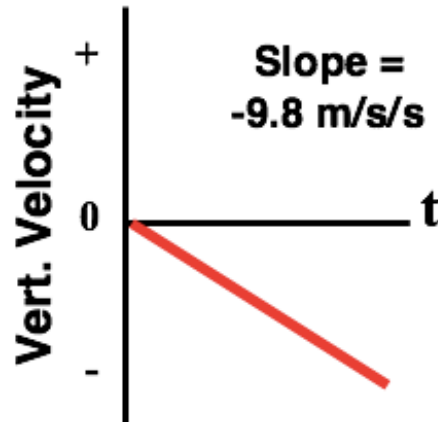
t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8



**"The
acceleration is a
constant value
and always
directed
downwards."**

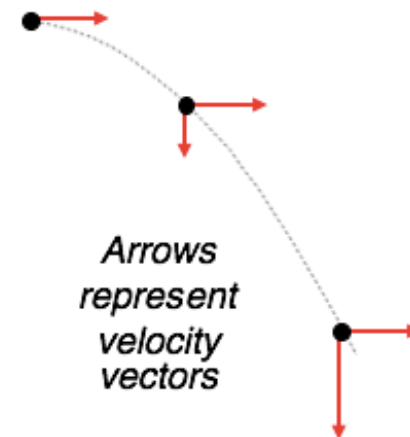
Question 42

One of these representations is not like the others. Which one doesn't belong?



"The acceleration is a constant value and always directed downwards."

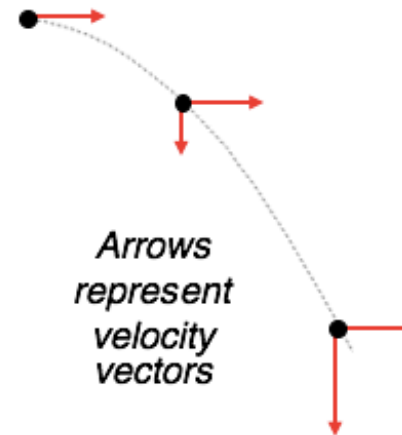
t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8



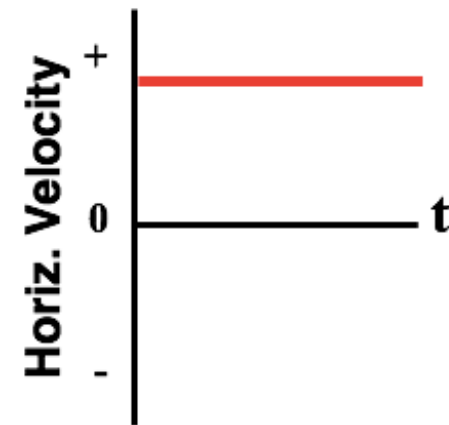
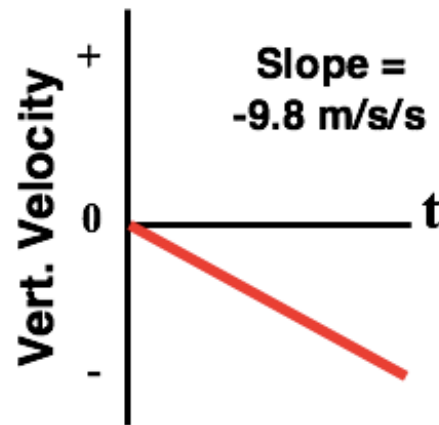
Question 43

One of these representations is not like the others. Which one doesn't belong?

"The acceleration is a constant value and always directed downwards."

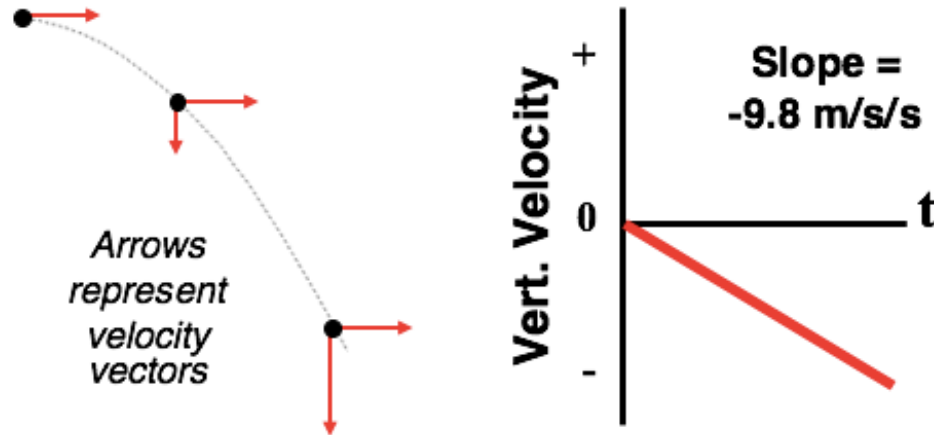


t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8

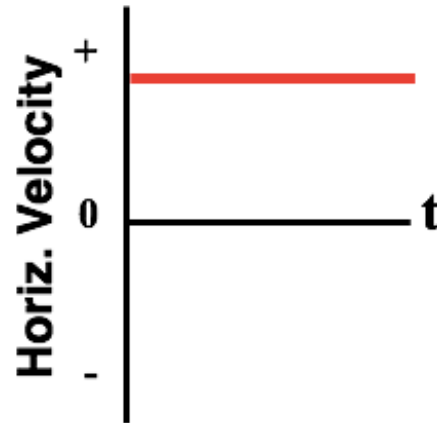


Question 44

One of these representations is not like the others. Which one doesn't belong?



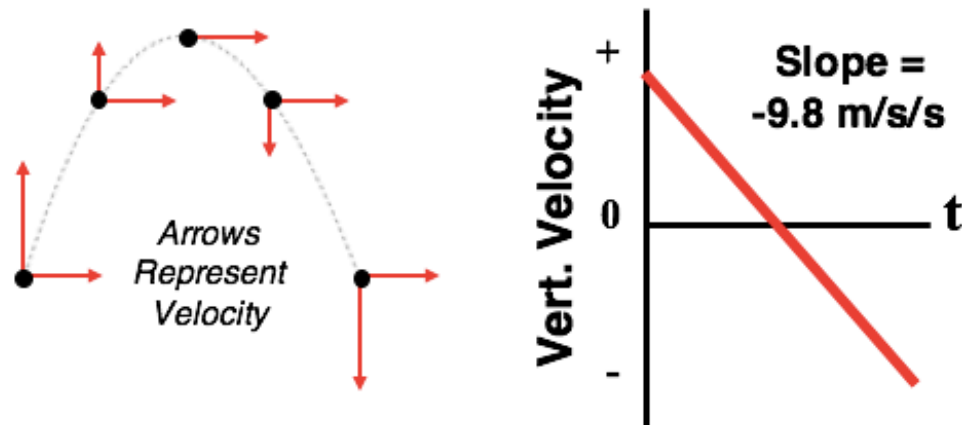
"The acceleration is a constant value and always directed downwards."



t (s)	V_x (m/s)	V_y (m/s)
0.0	8.0	-9.8
1.0	8.0	-9.8
2.0	8.0	-9.8
3.0	8.0	-9.8
4.0	8.0	-9.8

Question 45

One of these representations is not like the others. Which one doesn't belong?



t (s)	a_x (m/s ²)	a_y (m/s ²)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8

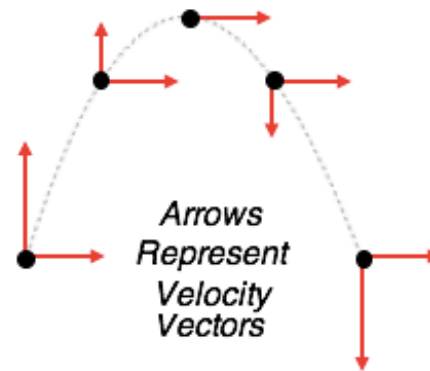
**The acceleration
is directed
upward when
rising and
directed
downward as it
falls.**

t (s)	v_x (m/s)	v_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

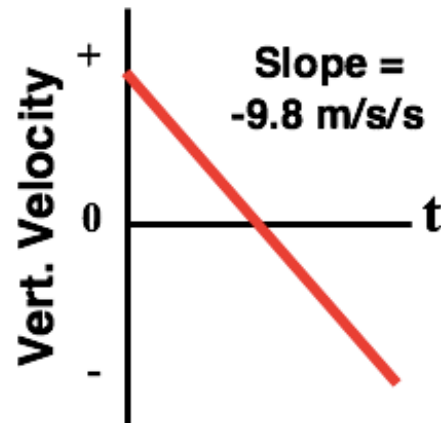
Question 46

One of these representations is not like the others. Which one doesn't belong?

**The acceleration
is directed
upward when
rising and
directed
downward as it
falls.**



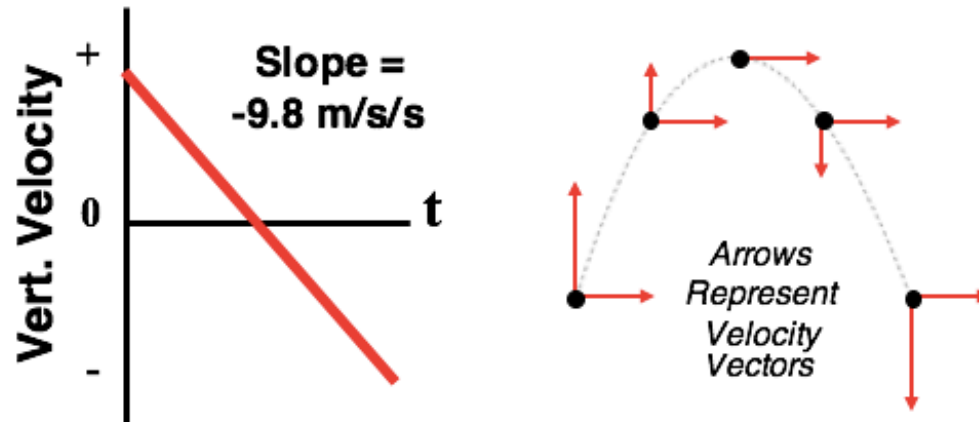
t (s)	a_x (m/s ²)	a_y (m/s ²)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8



t (s)	v_x (m/s)	v_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

Question 47

One of these representations is not like the others. Which one doesn't belong?



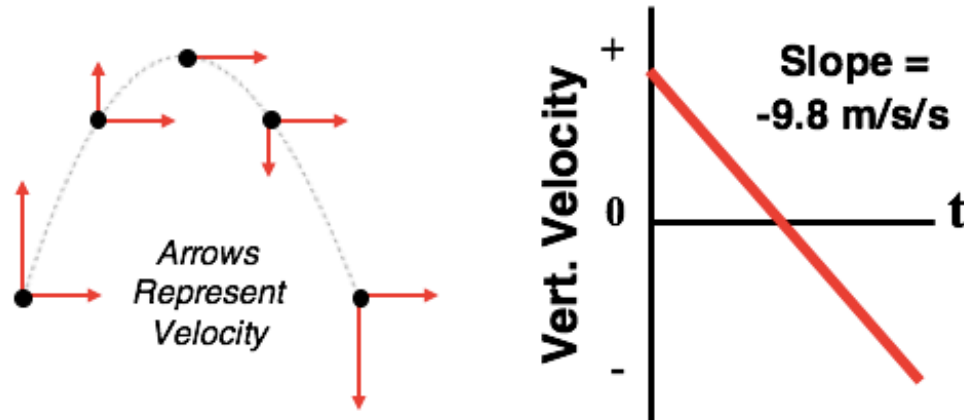
t (s)	V_x (m/s)	V_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

**The acceleration
is directed
upward when
rising and
directed
downward as it**

t (s)	a_x (m/s^2)	a_y (m/s^2)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8

Question 48

One of these representations is not like the others. Which one doesn't belong?



t (s)	v_x (m/s)	v_y (m/s)
0.0	33.9	19.6
1.0	33.9	9.8
2.0	33.9	0.0
3.0	33.9	-9.8
4.0	33.9	-19.6

**The acceleration
is directed
upward when
rising and
directed
downward as it**

t (s)	a_x (m/s ²)	a_y (m/s ²)
0.0	0.0	-9.8
1.0	0.0	-9.8
2.0	0.0	-9.8
3.0	0.0	-9.8
4.0	0.0	-9.8