

Which table represents a direct variation?

A)

x	1	2	3
y	1	2	3

C)

x	1	2	3
y	3	5	7

B)

x	1	2	3
y	0	1	2

D)

x	1	2	3
y	3	4	5

#1



Which equation does
NOT represent a direct variation?

A) $y = .5x$

C) $y = 1/5x$

B) $y = -5x$

D) $y = 5x + 1$

#2



If y varies directly with x ,
and $y = -3$ when $x = 1$,
what is y when $x = -6$?

A) 2

C) 18

B) -2

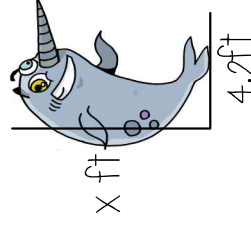
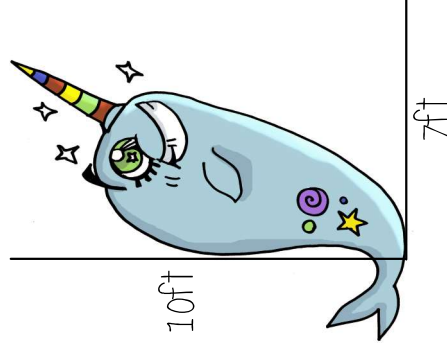
D) -18

#3



The relationship between the height of an object and the length of its shadow are in direct variation.

Based on this relationship,
what is the height of the small Narwhal?



A) 5.0

C) 6.0

B) 5.6

D) 6.2

#4



What is the constant of variation, k , for the table?

X	-6	3	12	15
Y	4	-2	-8	-10

A) $-\frac{3}{2}$

C) $-\frac{2}{3}$

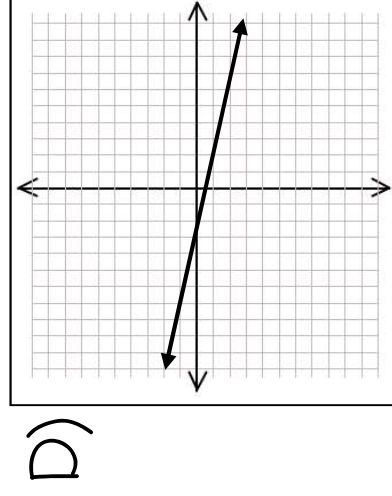
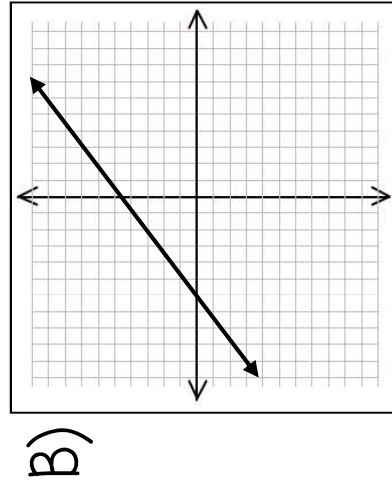
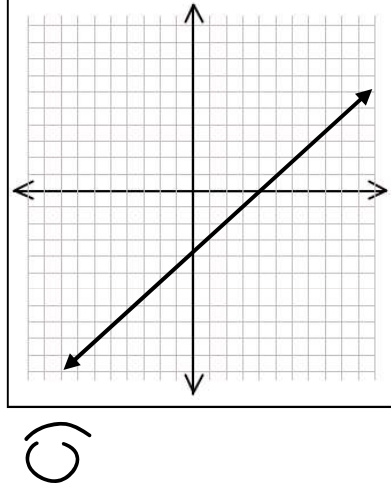
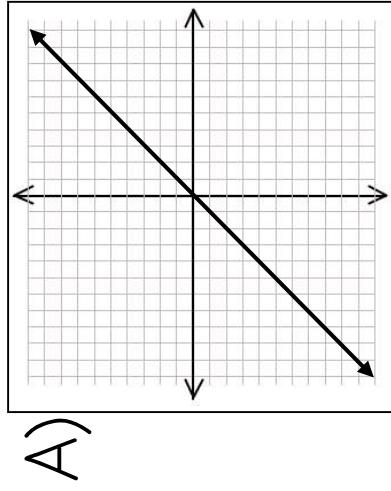
B) $\frac{3}{2}$

D) $\frac{2}{3}$

#5



Which graph represents a direct variation?



#6

A designer is outlining circles in ribbon.

The table compares the diameter of the circle to its circumference. What length of ribbon will the designer need to go around a circle with a diameter of 12.5cm?

Diameter	6	7	9
Circumference	18.84	21.98	28.26

A) 35.75 C) 39.25

B) 37.50 D) 41.75

#1



What is the constant of variation, k , for the table?

X	6	9	17	21
Y	13.2	19.8	37.4	46.2

A) 0.2

C) 2.2

B) 0.5

D) 2.5

#8



Which equation does
NOT represent a direct variation?

A) $y = 3x$

C) $y = 3x + 0$

B) $y = \frac{1}{3}x$

D) $y = 3x + 1$

#9



Sarah paid \$1,932 in tax on her new car which had a purchase price of \$80,500.

Which other car tax & price varies directly with hers?

A) Purchase Price = \$68,000 & Tax = \$1,020

B) Purchase Price = \$92,000 & Tax = \$2,760

C) Purchase Price = \$75,000 & Tax = \$1,350

D) Purchase Price = \$85,000 & Tax = \$2,040

#10



Which table represents a direct variation?

A)

x	4	6	8
y	36	54	72

C)

x	4	6	8
y	36	52	70

B)

x	1	2	3
y	5	25	75

D)

x	1	2	3
y	4	10	16

#11



If y varies directly with x ,
and $y = 4.5$ when $x = 2.5$,
what is y when $x = 12$?

A) 15.6

C) 26.8

B) 21.6

D) 37.4

#12



What is the constant of variation, k , for the table?

X	4	12	36	60
Y	0.29	0.87	2.61	4.35

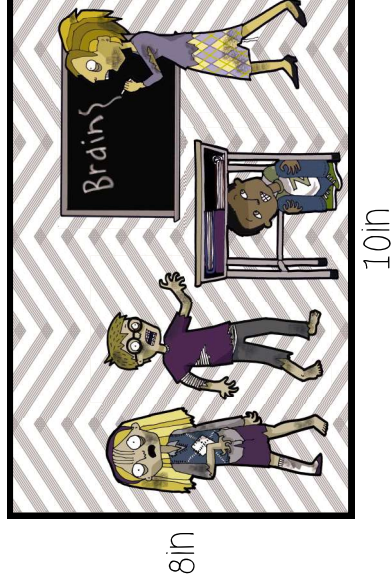
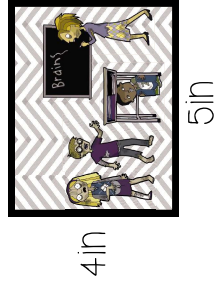
- A) 0.0365 C) 0.0935
- B) 0.0725 D) 0.1125

#13



A store's photo enlargement machine is set up so the length varies directly with the width.

Two current photo sizes are shown, what is another possible enlargement size?



A) 10in x 15in C) 18in x 25in

B) 16in x 20in D) 22in x 30in

#14



If y varies directly with x ,
and $y = 10$ when $x = 4$,
what is x when $y = 14$?

A) 5.6

C) 6.8

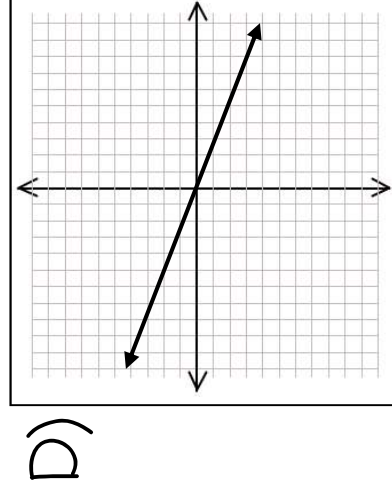
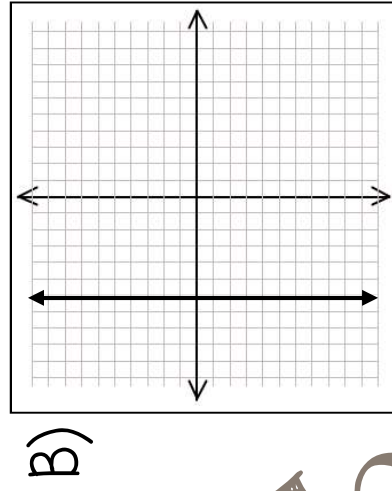
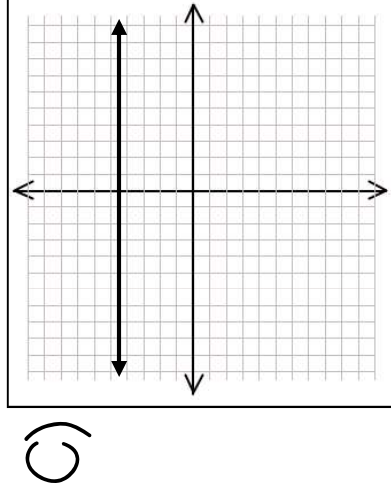
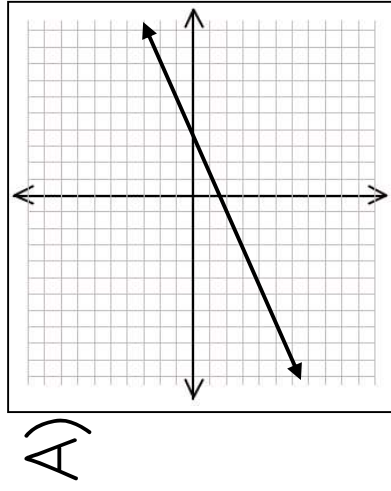
B) 6.2

D) 7.4

#15



Which graph represents a direct variation?



#16

Which table represents a direct variation?

A)

x	y
-2	4
-4	12
-6	20

B)

x	y
-2	8
-8	14
-10	22

C)

x	y
-4	-10
-10	-25
-12	-30

D)

x	y
-4	-14
-8	-18
-14	-26

#17



If y varies directly with x ,
and $y = 12$ when $x = 3$,
what is y when $x = 8$?

A) 4.5

C) 24

B) 16

D) 32

#18

