Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Functions 01 - Class Time Examples

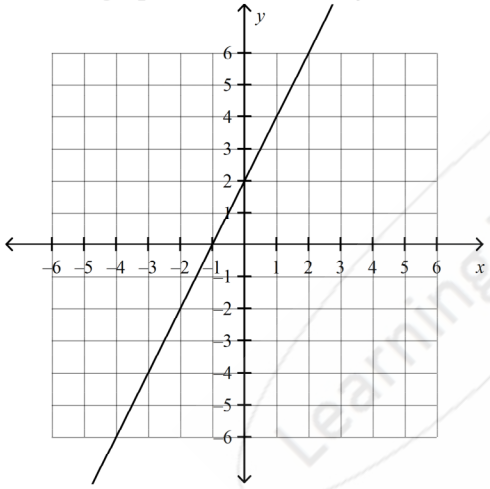
Multiple Choice

Identify the choice that best completes the statement or answers the question.

____ 1. For $f(x) = -5x + 4$, what is the value of x for which $f(x) = 29$?

a. $x = 1$
b. $x = -5$
c. $x = -4$
d. $x = 5$

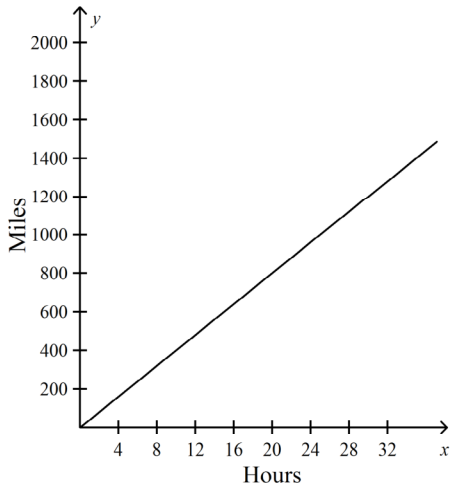
____ 2. Use the graph of the function $f(x) = 2x + 2$ to find the value of y when $x = 2$.



a. −2
b. 7
c. 6
d. 0

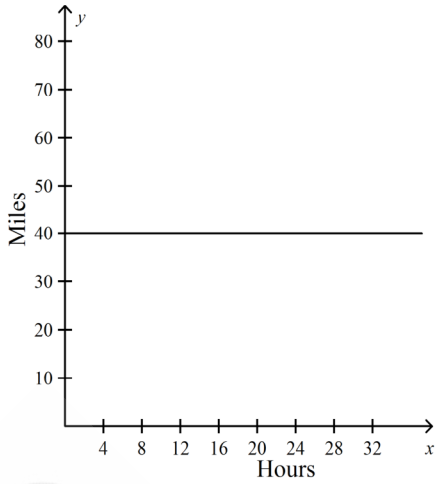
____ 3. The function $y = 40x$ describes how far from home Shu Ling is as she drives from Dallas to Miami. Graph the function. Use the graph to estimate how far from home Shu Ling is in 12 hours.

a.



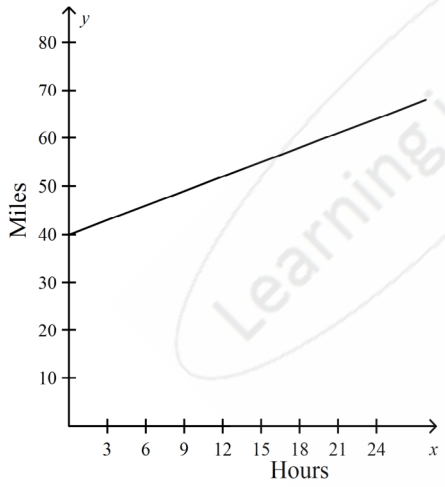
Shu Ling is about 480 miles from home in 12 hours.

c.



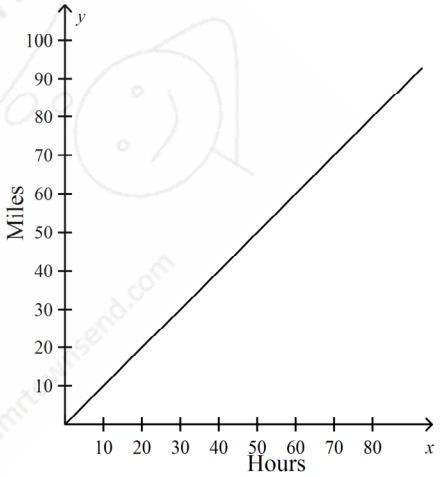
Shu Ling is about 40 miles from home in 12 hours.

b.



Shu Ling is about 52 miles from home in 12 hours.

d.



Shu Ling is about 12 miles from home in 12 hours.

____ 4. For $f(x) = -5x - 2$, evaluate $f(5)$.

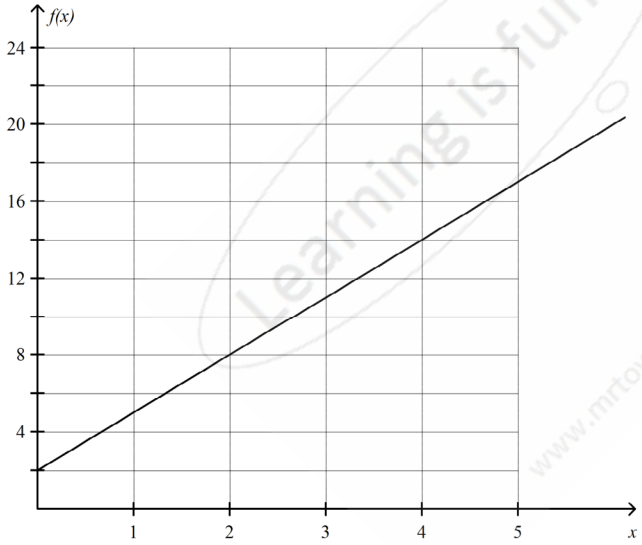
a. –32
b. –27
c. 23
d. –15

____ 5. If $f(x) = 5x - 2$, which of the following sets represents possible inputs and outputs of the function, represented as ordered pairs?

a. {(–2, –12), (0, –3), (1, 3)}
b. {(–1, –7), (0, –2), (–2, –11)}
c. {(2, 8), (3, 13), (–5, –27)}
d. {(–2, –13), (0, –2), (–2, –12)}

____ 6. Orio and Ted buy an equal number of comic books every month. The following equation shows the number of comic books, $f(x)$, that Orio has after x months:
$f(x) = 3x + 12$

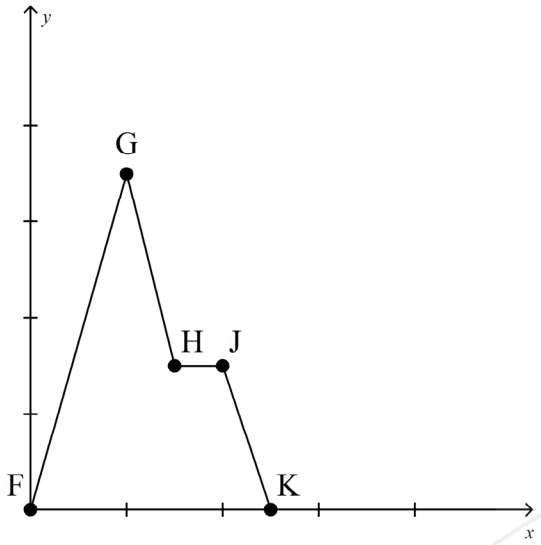
The following graph shows the number of comic books, $f(x)$, that Ted has after x months:



After 3 months, how many more comic books does Orio have than Ted?

a. 9
b. 10
c. 7
d. 8

___ 7. Which section of the function is increasing?



a. From points G to H
b. From points F to G
c. From points J to K
d. From points H to J

___ 8. A watering can dispenses water at the rate of 0.75 of a gallon per minute. The original volume of water in the can was 5 gallons. Which set of ordered pairs shows the volume of water in the can in gallons $f(x)$, as a function of time in minutes (x), from the first minute after the can starts dispensing water?

a. {(1, 4.25), (2, 3.5), (3, 2.75)}
b. {(4.25, 1), (3.5, 2), (2.75, 3)}
c. {(1, 5), (2, 4.25), (3, 3.5)}
d. {(5, 1), (4.25, 2), (3.5, 3)}

Functions 01 - Class Time Examples
Answer Section

MULTIPLE CHOICE

1. ANS: B PTS: 1 NAT: NT.CCSS.MTH.10.9-12.F.IF.2
   DOK: DOK 2
2. ANS: C PTS: 1 REF: 10725022-4683-11df-9c7d-001185f0d2ea
   OBJ: Finding Values Using Graphs
   NAT: NT.CCSS.MTH.10.9-12.A.REI.10 | NT.CCSS.MTH.10.9-12.F.IF.2
   LOC: MTH.C.10.07.01.01.005 TOP: Graphing Functions
   KEY: graph | solution | equation DOK: DOK 2
3. ANS: A PTS: 1 REF: 10727732-4683-11df-9c7d-001185f0d2ea
   OBJ: Problem-Solving Application
   NAT: NT.CCSS.MTH.10.9-12.A.REI.10 | NT.CCSS.MTH.10.9-12.F.IF.2
   STA: WY.WYCS.MTH.08.9-11.MA11.4.2 LOC: MTH.C.10.07.01.001
   TOP: Graphing Functions KEY: function | graph | rate | time | distance | speed
   DOK: DOK 2
4. ANS: B PTS: 1 REF: 1401156a-4683-11df-9c7d-001185f0d2ea
   OBJ: Evaluating Functions NAT: NT.CCSS.MTH.10.9-12.F.IF.2
   STA: WY.WYCS.MTH.08.9-11.MA11.4.2
   LOC: MTH.C.10.07.01.010 | MTH.C.10.07.01.011 TOP: Function Notation
   KEY: function | input | output | evaluate DOK: DOK 2
5. ANS: C PTS: 1 REF: 4.8_pt1
6. ANS: B PTS: 1 REF: 4.10_pt2
7. ANS: B PTS: 1 REF: 4.5
8. ANS: A PTS: 1 REF: 4.6