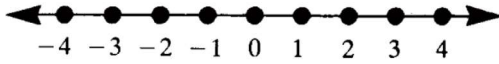
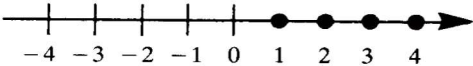


Practice Exercise 9

1. The figure represents the graph of what set of numbers?



- A. {natural numbers}
 B. {whole numbers}
 C. {integers}
 D. {rational numbers}
 E. {real numbers}
2. The figure represents the graph of what set of numbers?



- A. {natural numbers}
 B. {whole numbers}
 C. {integers}
 D. {rational numbers}
 E. {real numbers}
3. Which of the following represents the range of $\{(0, -5) (-1, 3) (1, 2) (2, 2) (3, -1) (-5, 3)\}$?
- A. $\{-5, -1, 0, 1, 2, 3\}$
 B. $\{-1, 0, 3\}$
 C. $\{-5, -2, -1, 2\}$
 D. $\{-5, -1, 2, 3\}$
 E. $\{-5, -1, 0, 2, 3\}$

4. If $f(x) = x^3 - 1$, then $f(-2) = ?$

- A. -27 D. -1
 B. -9 E. 9
 C. -7

5. The slope of the line whose equation is $4x + 5y = 20$ is?

- A. $\frac{4}{5}$ D. -4
 B. $-\frac{4}{5}$ E. $\frac{5}{4}$
 C. 4

$$5y = -4x + 20$$

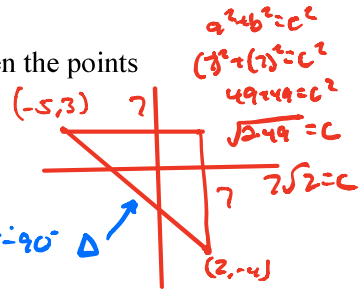
$$y = -\frac{4}{5}x + 4$$

6. What is the slope of the line joining $(5, -2)$ and $(3, -6)$?

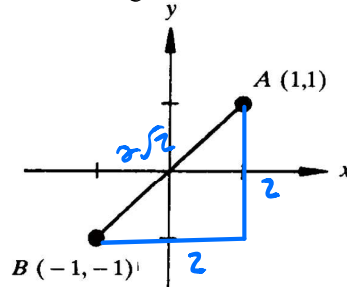
- A. $-\frac{1}{4}$ D. -4 $m = \frac{4}{2}$
 B. 2 E. 4
 C. -2

7. What is the distance between the points $(2, -4)$ and $(-5, 3)$?

- A. $7\sqrt{2}$ D. 14
 B. 5 E. 98
 C. $2\sqrt{7}$

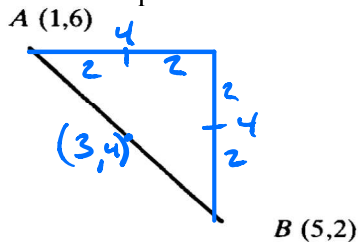


8. What is the length of \overline{AB} ?



- A. $\sqrt{2}$ D. 1
 B. $\sqrt{3}$ E. 2
 C. $\sqrt{8} = 2\sqrt{2}$

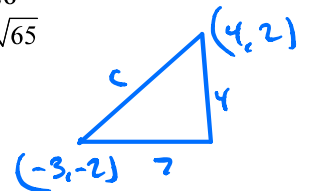
9. What is the midpoint of \overline{AB} ?



- A. (6, 8) D. (8, 6)
 B. (3, 4) E. (3, 1)
 C. (4, 3)

10. The distance between the points $(4, 2)$ and $(-3, -2)$ is:

- A. $2\sqrt{7}$ D. 28
 B. $\sqrt{77}$ E. $\sqrt{65}$
 C. $13\sqrt{5}$



$$(7)^2 + (4)^2 = c^2$$

$$49 + 16 = c^2$$

$$65 = c^2$$

$$\sqrt{65} = c$$