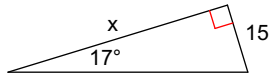


Review Semester 1

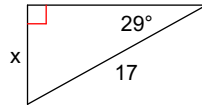
Find the missing side. Round to the nearest tenth.

1)



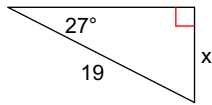
- A) 54.5
- B) 4.6
- C) 49.1
- D) 2.4

2)



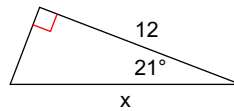
- A) 44.0
- B) 10.0
- C) 8.2
- D) 35.1

3)



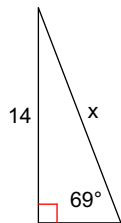
- A) 41.9
- B) 12.6
- C) 8.6
- D) 9.0

4)



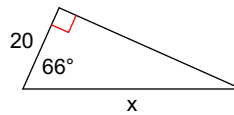
- A) 15.4
- B) 11.2
- C) 12.9
- D) 16.3

5)



- A) 16.3
- B) 15.0
- C) 12.4
- D) 13.1

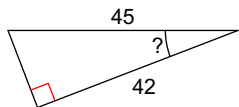
6)



- A) 65.0
- B) 49.2
- C) 8.1
- D) 4.6

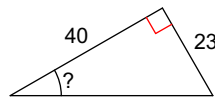
Find the measure of the indicated angle to the nearest degree.

7)



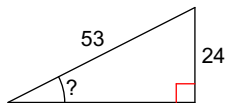
- A)  $43^\circ$
- B)  $32^\circ$
- C)  $21^\circ$
- D)  $69^\circ$

8)



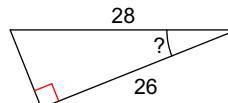
- A)  $30^\circ$
- B)  $28^\circ$
- C)  $35^\circ$
- D)  $55^\circ$

9)



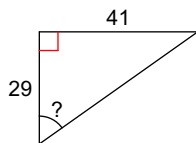
- A)  $27^\circ$
- B)  $63^\circ$
- C)  $66^\circ$
- D)  $24^\circ$

10)



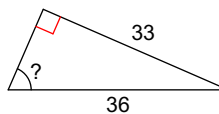
- A)  $22^\circ$
- B)  $47^\circ$
- C)  $68^\circ$
- D)  $43^\circ$

11)



- A)  $55^\circ$       B)  $45^\circ$   
 C)  $72^\circ$       D)  $21^\circ$

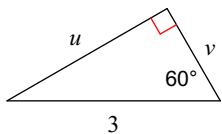
12)



- A)  $47^\circ$       B)  $43^\circ$   
 C)  $59^\circ$       D)  $66^\circ$

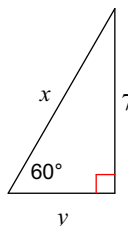
**Find the missing side lengths. Leave your answers as radicals in simplest form.**

13)



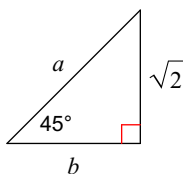
- A)  $u = \frac{3\sqrt{3}}{4}, v = \frac{3\sqrt{2}}{2}$   
 B)  $u = \frac{3\sqrt{3}}{2}, v = \frac{3}{2}$   
 C)  $u = \frac{3\sqrt{3}}{2}, v = \frac{3\sqrt{2}}{2}$   
 D)  $u = \frac{3\sqrt{3}}{4}, v = \frac{3}{2}$

14)



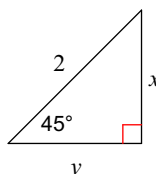
- A)  $x = \frac{14\sqrt{3}}{3}, y = \frac{7\sqrt{3}}{3}$   
 B)  $x = \frac{14\sqrt{3}}{3}, y = \frac{7\sqrt{6}}{6}$   
 C)  $x = \frac{14\sqrt{6}}{3}, y = \frac{7\sqrt{3}}{3}$   
 D)  $x = \frac{14\sqrt{6}}{3}, y = \frac{7\sqrt{6}}{6}$

15)



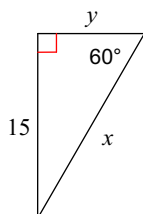
- A)  $a = 1, b = 2$   
 B)  $a = 2\sqrt{3}, b = \sqrt{2}$   
 C)  $a = 2, b = \sqrt{2}$   
 D)  $a = 2, b = 1$

16)



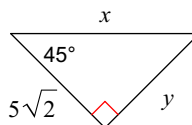
- A)  $x = 2, y = 2$   
 B)  $x = \sqrt{6}, y = \sqrt{6}$   
 C)  $x = \sqrt{2}, y = \sqrt{2}$   
 D)  $x = \frac{\sqrt{6}}{2}, y = \frac{\sqrt{6}}{2}$

17)



- A)  $x = 10, y = 10\sqrt{3}$   
 B)  $x = 10\sqrt{3}, y = 5\sqrt{3}$   
 C)  $x = 5\sqrt{3}, y = 10$   
 D)  $x = 10, y = 5\sqrt{3}$

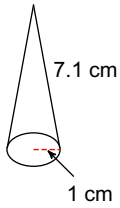
18)



- A)  $x = 10, y = 5\sqrt{2}$   
 B)  $x = 10, y = 10\sqrt{2}$   
 C)  $x = \frac{10\sqrt{3}}{3}, y = 10\sqrt{2}$   
 D)  $x = \frac{10\sqrt{3}}{3}, y = 5\sqrt{2}$

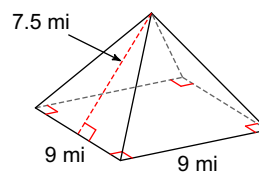
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

19)



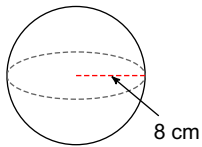
- A)  $35.76 \text{ cm}^2$       B)  $29.11 \text{ cm}^2$   
 C)  $32.37 \text{ cm}^2$       D)  $25.45 \text{ cm}^2$

20)



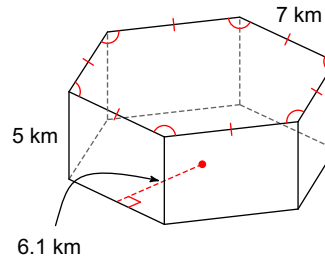
- A)  $213 \text{ mi}^2$       B)  $216 \text{ mi}^2$   
 C)  $272 \text{ mi}^2$       D)  $109 \text{ mi}^2$

21)



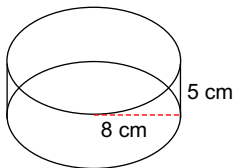
- A)  $820.2 \text{ cm}^2$       B)  $804.25 \text{ cm}^2$   
 C)  $871.77 \text{ cm}^2$       D)  $1202.54 \text{ cm}^2$

22)



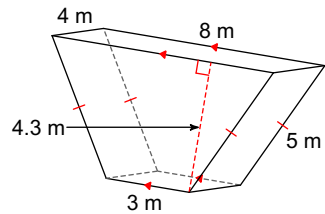
- A)  $231.35 \text{ km}^2$       B)  $466.2 \text{ km}^2$   
 C)  $430.5 \text{ km}^2$       D)  $338.1 \text{ km}^2$

23)



- A)  $394.63 \text{ cm}^2$       B)  $856.22 \text{ cm}^2$   
 C)  $832.06 \text{ cm}^2$       D)  $653.45 \text{ cm}^2$

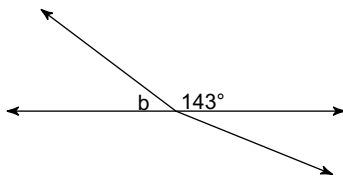
24)



- A)  $107.9 \text{ m}^2$       B)  $151.1 \text{ m}^2$   
 C)  $131.3 \text{ m}^2$       D)  $107.65 \text{ m}^2$

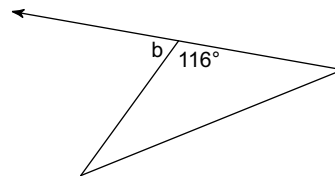
Find the measure of angle b.

25)



- A)  $143^\circ$       B)  $53^\circ$   
 C)  $102^\circ$       D)  $37^\circ$

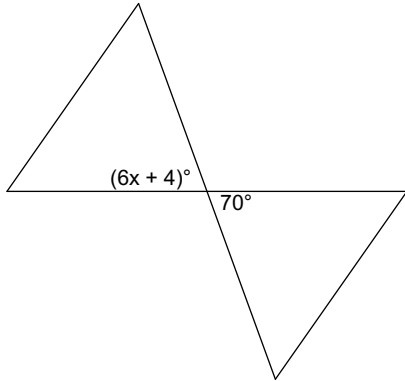
26)



- A)  $116^\circ$       B)  $64^\circ$   
 C)  $26^\circ$       D)  $92^\circ$

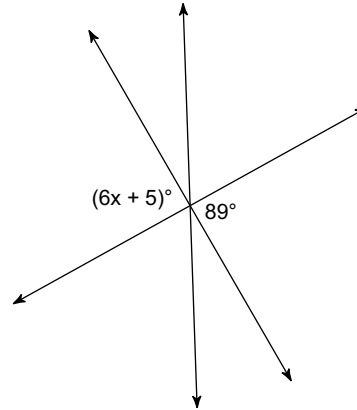
Find the value of x.

27)



- A) 9
- B) 11
- C) 10
- D) 14

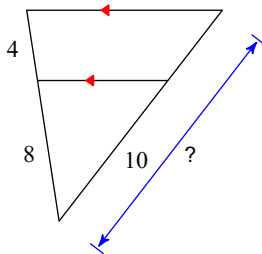
28)



- A) 14
- B) 12
- C) 9
- D) 15

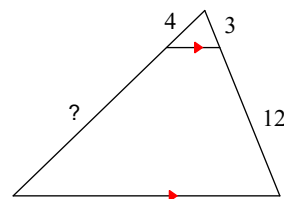
Find the missing length indicated.

29)



- A) 35
- B) 25
- C) 9
- D) 15

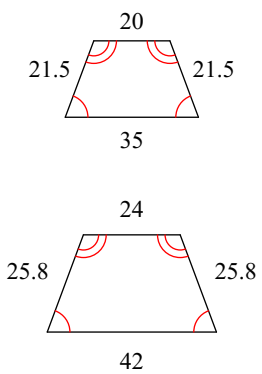
30)



- A) 18
- B) 15
- C) 16
- D) 10

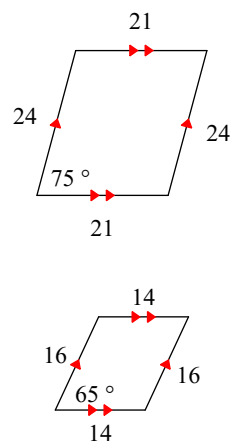
State if the polygons are similar.

31)



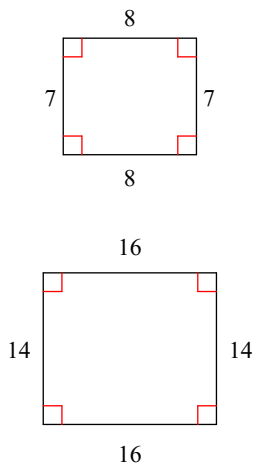
- A) similar
- B) not similar

32)



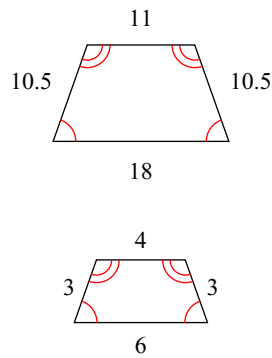
- A) not similar
- B) similar

33)



A) not similar      B) similar

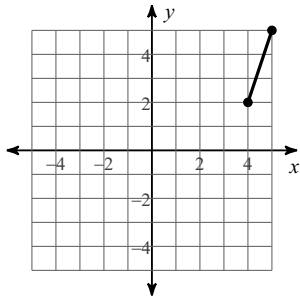
34)



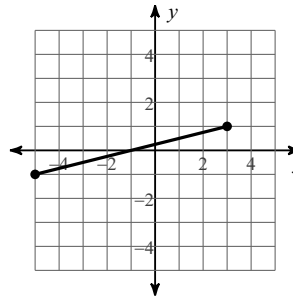
A) not similar      B) similar

**Find the distance between each pair of points.**

35)

A)  $\sqrt{2}$       B) 2  
C)  $\sqrt{10}$       D)  $4\sqrt{2}$ 

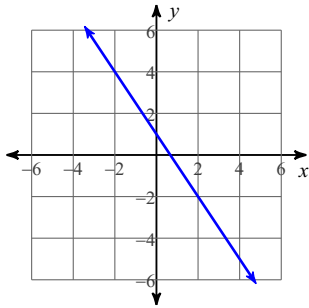
36)

A)  $\sqrt{10}$       B)  $\sqrt{6}$   
C)  $2\sqrt{17}$       D) 2**Write the slope-intercept form of the equation of the line described.**37) through:  $(3, -3)$ , parallel to  $y = -\frac{7}{5}x - 2$ A)  $y = -\frac{7}{5}x - \frac{6}{5}$       B)  $y = -\frac{7}{5}x + \frac{6}{5}$   
C)  $y = \frac{6}{5}x - \frac{7}{5}$       D)  $y = -\frac{6}{5}x - \frac{7}{5}$ 38) through:  $(5, 3)$ , parallel to  $y = \frac{4}{5}x - 5$ A)  $y = -x + \frac{4}{5}$       B)  $y = -\frac{4}{5}x - 1$   
C)  $y = -x - \frac{4}{5}$       D)  $y = \frac{4}{5}x - 1$ 39) through:  $(-5, 2)$ , perp. to  $y = \frac{5}{6}x + 5$ A)  $y = -4x - \frac{6}{5}$       B)  $y = x - 4$   
C)  $y = -\frac{6}{5}x - 4$       D)  $y = -4x + 1$ 40) through:  $(-2, -1)$ , perp. to  $y = 2x - 5$ A)  $y = \frac{1}{2}x - 2$       B)  $y = -\frac{1}{2}x - 2$   
C)  $y = -2x - \frac{1}{2}$       D)  $y = -2x + \frac{1}{2}$

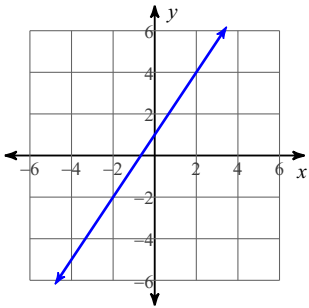
Sketch the graph of each line.

41)  $y = -\frac{3}{2}x + 1$

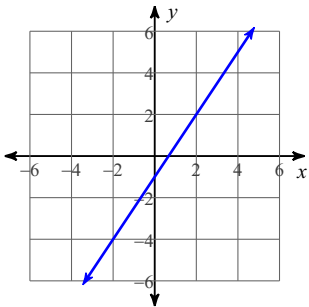
A)



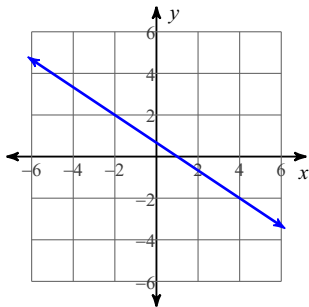
B)



C)

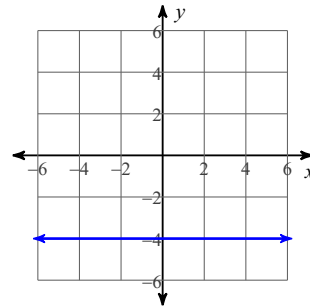


D)

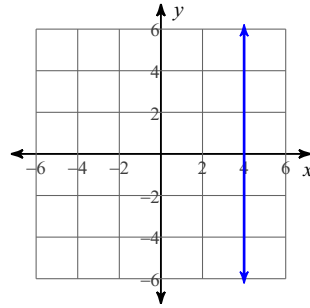


42)  $y = -4$

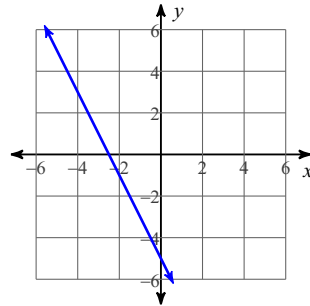
A)



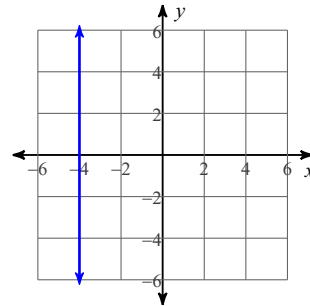
B)



C)

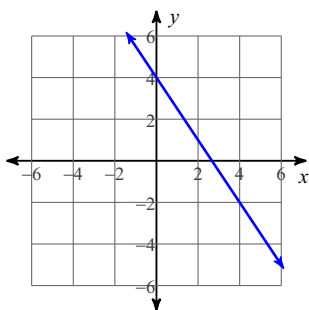


D)

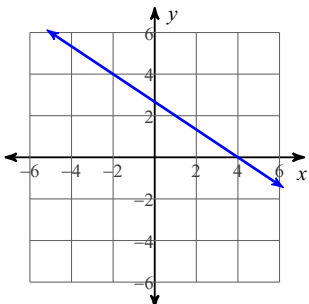


43)  $y = -\frac{3}{2}x + 4$

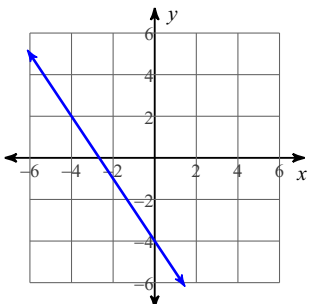
A)



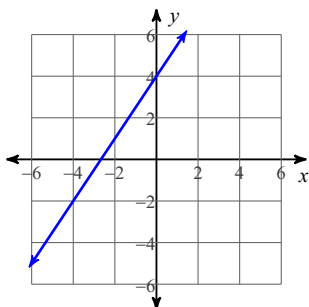
B)



C)

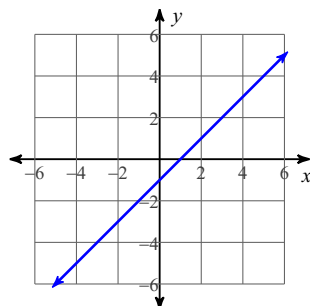


D)

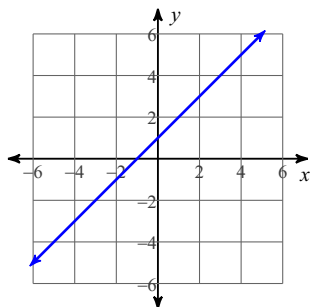


44)  $y = x + 1$

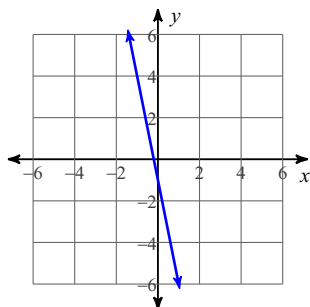
A)



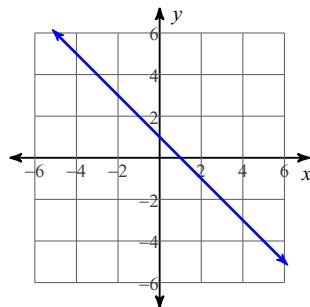
B)



C)



D)



## Answers to Review Semester 1 (ID: 1)

1) C  
5) B  
9) A  
13) B  
17) B  
21) B  
25) D  
29) D  
33) B  
37) B  
41) A

2) C  
6) B  
10) A  
14) A  
18) A  
22) B  
26) B  
30) C  
34) A  
38) D  
42) A

3) C  
7) C  
11) A  
15) C  
19) D  
23) D  
27) B  
31) A  
35) C  
39) C  
43) A

4) C  
8) A  
12) D  
16) C  
20) B  
24) C  
28) A  
32) A  
36) C  
40) B  
44) B