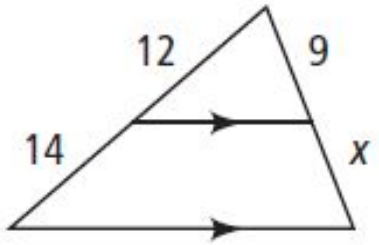
NAME : _____

CLASS : _____

DATE : _____

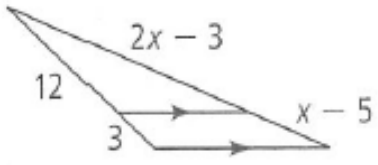
Homework 3.3 due Fri 11/14 *FOUR Problems Require Work*

17 Questions

1. 

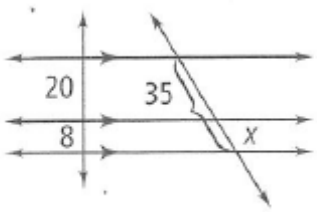
WORK REQUIRED: Solve for x

- [ ] a) 7.7
- [ ] b) 18.7
- [ ] c) 11
- [ ] d) 10.5

2. 

WORK REQUIRED: Solve for the variable x Remember to use the distributive property!

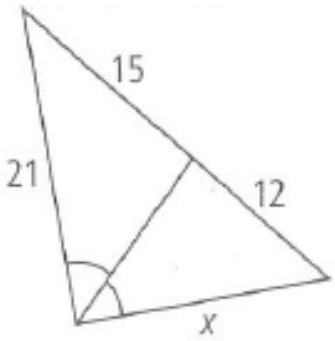
- [ ] a) x = 8.5
- [ ] b) x = 10
- [ ] c) x = 1
- [ ] d) x = 2

3. 

If 35 encompasses the two segments, solve for x. Hint: use 28 for one of the ratio components as it corresponds to 35.

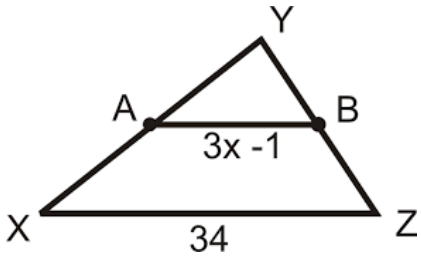
- [ ] a) x = 10
- [ ] b) x = 25
- [ ] c) x = 11.7
- [ ] d) x = -25

Help

4. 

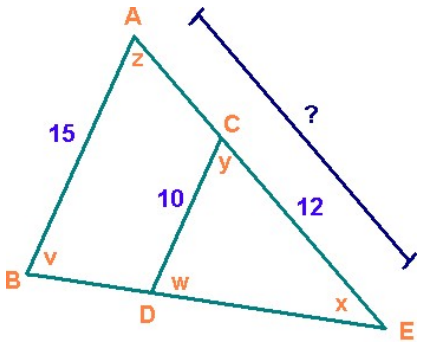
WORK REQUIRED: Solve for x

- [ ] a) x = 16.8
- [ ] b) x = 26.3
- [ ] c) x = 8.6
- [ ] d) x = 2.4

5. 

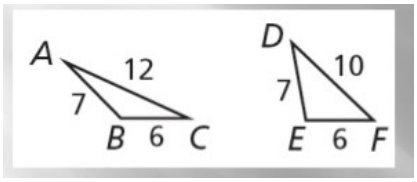
Find the length of AB Hint: AB is the midsegment so it is half the length of XZ

- [ ] a) 6
- [ ] b) 11
- [ ] c) 17
- [ ] d) 68

6. 

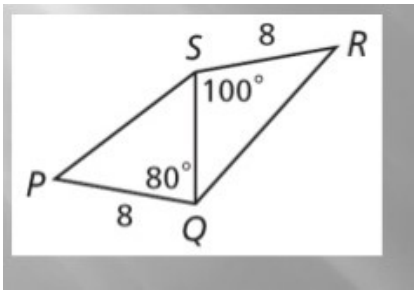
WORK REQUIRED: If the triangles are similar, solve for the question mark. Hint: draw the two triangles to see the corresponding parts

- [ ] a) 8
- [ ] b) 12.5
- [ ] c) 18
- [ ] d) 24

7. 

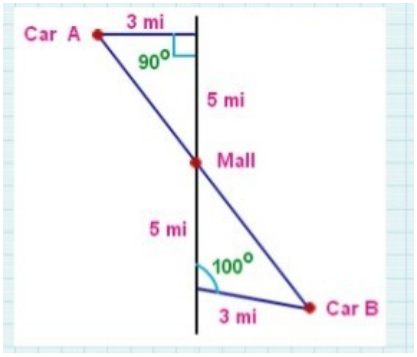
Mark each of the statements that are true

- [ ] a) AC > DF
- [ ] b) AC < DF
- [ ] c) Angle B > Angle E
- [ ] d) Angle B < Angle E

8. 

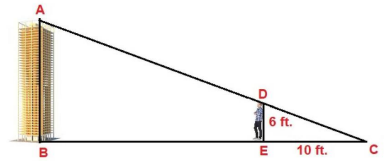
Mark all that statements that are true

- [ ] a) SR= PQ
- [ ] b) PS < QR
- [ ] c) PS > QR
- [ ] d) PQ < SR

9. 

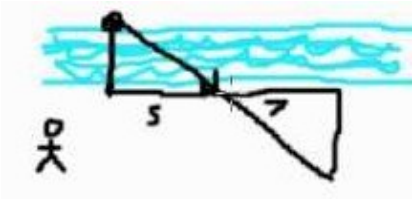
Which Car is closest to the Mall?

- [ ] a) Car A, because the hinge angle is 90 degrees
- [ ] b) Car B, because the hinge angle is 100 degrees

10. 

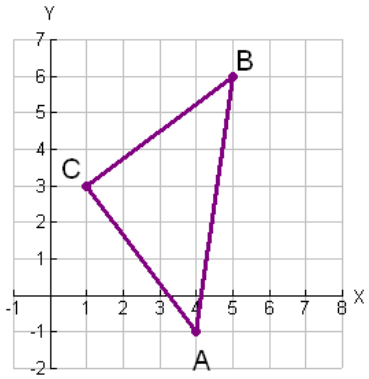
WORK REQUIRED Use similar triangles to estimate the height of the building, if segment BE = 32 feet

- [ ] a) 18 feet
- [ ] b) 25.2 feet
- [ ] c) 19.2 feet
- [ ] d) 28 feet

11. 

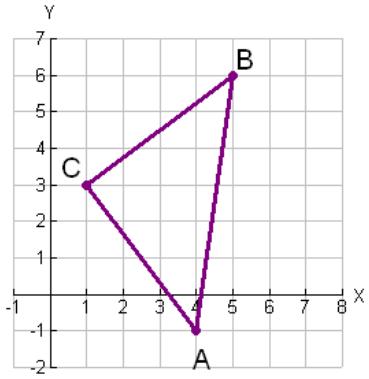
Estimate the width of the river (left side of shaded triangle), knowing that the right side of the other triangle is 10 meters.

- [ ] a) 14 meters
- [ ] b) 3.5 meters
- [ ] c) 7.1 meters
- [ ] d) 8 meters

12. 

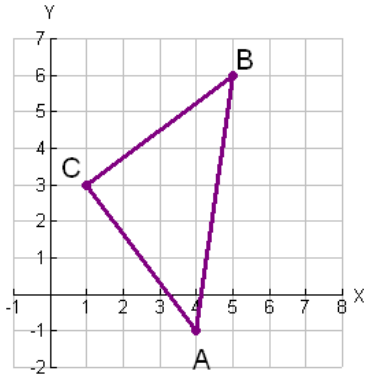
Mark the coordinates that are correctly identified in the triangle

- [ ] a) A(4,-1)
- [ ] b) A(-1,4)
- [ ] c) B(6,5)
- [ ] d) B(5,6)
- [ ] e) C(1,3)

13. 

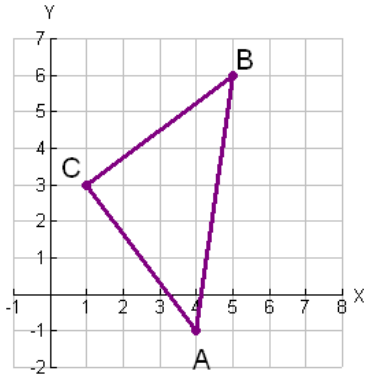
If A is reflected across the x-axis, what is its image?

- [ ] a) A'(4,-1)
- [ ] b) A'(-4,-1)
- [ ] c) A'(4,1)
- [ ] d) A'(-4,1)

14. 

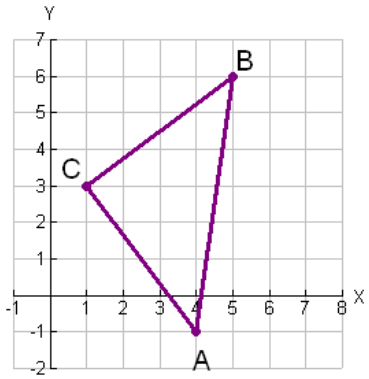
If point A is rotated 180 degrees, what would its image be?

- [ ] a) A'(4,-1)
- [ ] b) A'(-1,4)
- [ ] c) A'(-4,1)
- [ ] d) A'(1,-4)

15. 

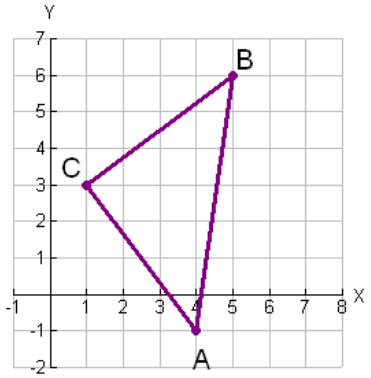
If B is rotated 90 degrees counter-clockwise, where will its image be?

- [ ] a) B'(6,5)
- [ ] b) B'(-6,5)
- [ ] c) B'(-5,-6)
- [ ] d) B'(6,-5)

16. 

If C is translated using T(x,y): (x - 4, y + 5), what will its image be?

- [ ] a) C'(-3,8)
- [ ] b) C'(1,3)
- [ ] c) C'(-1,6)
- [ ] d) C'(2,7)

17. 

If B is dilated with a scale factor of -2, what would its image be?

- [ ] a) B'(3,3)
- [ ] b) B'(-10,-12)
- [ ] c) B'(-12,-10)
- [ ] d) B'(5,6)