

# CP Geometry

## Unit 5 Jeopardy Key

### Similar Polygons

- 1.) One is a dilation of the other.
- 2.)  $x = 9.71$
- 3.) No (ALL matching sides have same ratio  
NOT ALL matching angles are congruent)
- 4.)  $w = 62$   
 $x = 7.5$   
 $y = 10.5$   
 $z = 12$

### Similar Triangles

- 2.)  $DF / EF$
- 3.)  $m = 28$
- 4.) No
- 5.)  $s = 42$ ;  $n = 54$   
~ by AAA
- 6.)  $r = 28$ ;  $s = 120$

### Dilations

- 2.) Matching sides have the same ratio  
Matching angles are congruent
- 3.)  $Q' (-1.5, 4.5)$   
 $U' (6, 10.5)$   
 $A' (7.5, 12)$   
 $D' (3, 7.5)$
- 4.) Scale Factor =  $-1/2$
- 5/6.) Be able to do problems with constructions.

### Side-Splitting

- 2.)  $x = 3.2$ ;  $y = 2.67$
- 3.)  $x = 11.2$ ;  $y = 1.43$   
 $w = 6.15$ ;  $z = 11.10$
- 4.)  $m \parallel p$
- 5.)  $x = 30$ ;  $y = 6$
- 6.)  $x = 6.5$ ;  $y = -0.4$

### Trig Lengths

- 2.)  $x = 8.24$ ;  $y = 20.40$
- 3.)  $w = 10.76$
- 4.)  $x = 10$ ;  $a = 0.972$ ;  $b = 5.09$
- 5.)  $A = 26.49$ ;  $B = 20.69$
- 6.)  $x = 68.24$
- 7.)  $x = 144.12$ ;  $y = 141.33$

### Trig Angles

- 3.) 13.61, 76.39
- 4.) 16.26, 73.74
- 5.) 41.81
- 6.) 22.25

### Special Right Triangles

- 1.)  $x = y = 5\sqrt{2}$
- 2.)  $x = 5\sqrt{33}$ ;  $y = 10\sqrt{33}$
- 3.)  $x = 18\sqrt{30}$ ;  $Y = 54\sqrt{10}$ ;  $Z = 36\sqrt{30}$
- 4.)  $90\sqrt{2}$
- 5.)  $Y = 11\sqrt{3}$  ;  $Y = 2\sqrt{157}$
- 6.)  $A = \frac{16\sqrt{105}}{3}$   $B = \frac{8\sqrt{105}}{3}$   $C = 8\sqrt{35}$   $D = 4\sqrt{70}$   $E = 18$   $F = 6\sqrt{3}$

### Trig Apps

- 3.) 129.57 meters
- 4.) 69.9 feet
- 5.) 84.99 degrees
- 10.) 363.39

### Final Jeopardy

$$A = \frac{8\sqrt{15}}{3} \quad B = 8\sqrt{5} \quad C = \frac{16\sqrt{15}}{3} \quad D = \frac{16\sqrt{15}}{3} \quad E = \frac{16\sqrt{30}}{3} \quad F = 8\sqrt{5} \quad G = \frac{8\sqrt{15}}{3}$$