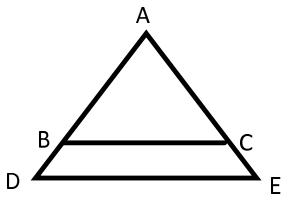
Similar Triangle and Trig Review

Textbook: practice tests on page 390 & page 432 and...



1. Find the lengths to the nearest tenth, for CE and BC, given that DE is 18 m, AB is 14 m, BD is 1 m, AC is 12 m. Also BC || DE.

2. Ryan and Alec are using an overhead projector to enlarge a design that they are tracing on a wall to draw a mural. When they place the projector 2 m from the wall, the image is 0.75 m high. They want the image to be 2 m high. Where should they place the projector?

3. Find angle C in ΔABC, if angle B is 27°, b is 15 cm and c is 8 cm.

4. In ΔMNP, angle M is 67°, angle N is 32° and n is 15 cm. Find m.

5. In ΔDEF, angle D is 68°, e is 6.2 cm and f is 3.2 cm. Solve ΔDEF.

6. In ΔPQR, angle P is 83°, angle Q is 45° and r is 18 cm. Solve ΔPQR.

7. A sail is in the shape of a triangle with sides of 10 m, 7 m and 13 m. Find the largest angle of the sail.

8. Rachel and Riley went out in two separate boats to place markers for a boat race. Their paths formed an angle of 85°. Rachel rowed 85 m and Riley rowed 102 m to place their markers. How far apart are the markers?

Answers:

1. *CE= 0.9 m*
   BC = 16.8 m
2. *5.3 m*
3. *14°*
4. *26 cm*
5. *d = 5.8 cm*
   E = 81.3°
   F = 30.7°
6. *R = 52°*
   p = 22.7 cm
   q = 16.2 cm
7. *98.2°*
8. *127 m*