Year 8 Angles and Constructions – Developing

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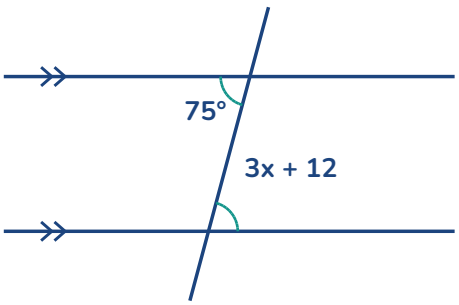
Year 8 · Maths · Angles, Polygons and Constructions · Level 2 Developing · 10 questions

Name _____ **Date** _____

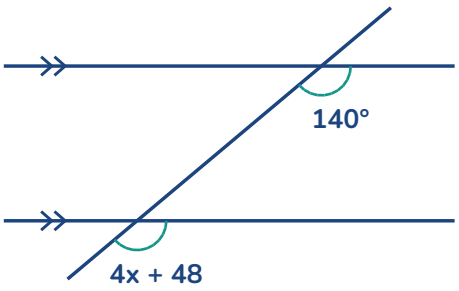
A. Use angle facts and constructions

1. The lines marked with arrows are parallel. Write an equation and find x. Give a reason.



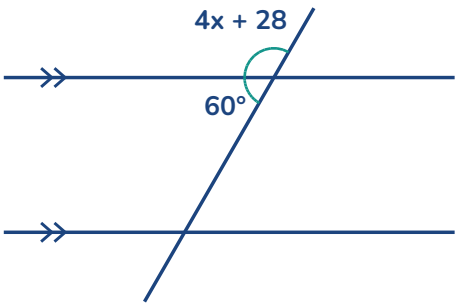
Answer _____

2. The lines marked with arrows are parallel. Write an equation and find x. Give a reason.



Answer _____

3. The lines marked with arrows are parallel. Write an equation and find x. Give a reason.



Answer _____

4. Draw a line segment PQ 10.7 cm long. Construct its perpendicular bisector with compasses. How far from P is the midpoint, and what angle does the bisector make with PQ?

Answer _____

5. Draw an angle of 142°. Construct its bisector with compasses. What size are the two angles you have made?

Answer _____

6. Construct triangle ABC with AB = 7 cm, angle A = 50° and angle B = 45°, using a ruler and protractor. What size should angle C be?

Answer _____

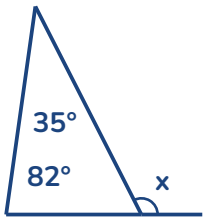
7. In a triangle, the two interior opposite angles to an exterior angle are x and 3x. The exterior angle is 112°. Find x and the size of each angle.

Answer _____

8. In a triangle, the two interior opposite angles to an exterior angle are x and 2x. The exterior angle is 99°. Find x and the size of each angle.

Answer _____

9. In triangle ABC, angle A = 82° and angle C = 35°. Side AB is extended beyond B. Find the exterior angle x at B.



Answer _____

10. Name the quadrilateral that has all four sides equal and four right angles.

Answer _____