ANSWERS for Angle Facts & Properties of Triangles and Quadrilaterals – W/C 01/06/20

The answers in red were the optional questions. Make sure you have always given a reason

1. a = 70° (angles on a straight line add up to 180°)

2. a = 60° (angles in a Triangle add up to 180°)

3. a = 130° (Vertically opposite Angles are equal)

4. a = 90° (angles in a quadrilateral add up to 180°)

5. a = 80° (angles at a point add up to 360°)

6. a = 125° (Co-interior or Allied angle – add up to 180°)

7. a = 80° (Corresponding angles are equal)

8. a = 120°(angles at a point add up to 360°)

9. a = 45° (angles on a straight line add up to 180°)

10. a = 116° (Co-interior or Allied angle – add up to 180°)

11. a = 78° (Isosceles Triangle so a = (180 – 24) ÷ 2, as base angles are the same)

12. a = 125° (Alternate Angles are equal), b= 55° (Angles on a straight line)

13. b = 60° (angles on a straight line add up to 180°)
    a= 40° (angles in a Triangle add up to 180°)

14. a = 105° (Vertically opposite angles)
    b= 105°(Alternate angles are equal)
    c= 70° (Allied angles add up to 180 so c= 180 – 110)
    or angle next to b is 75° (angles on a straight line add up to 180°
    and so c = 360 – (110 + 105 + 75) = 70° (angles in a quadrilateral add up to 360°)

15. a = 30° (6a = 180° angles on a straight line add up to 180°)

16. c = 55°, (angles in a triangle add up to 180°)
    b = 45° (Alternate angles are equal)
    a= 80° (angles on a straight line add up to 180°) a + b + c are a