Y8 – Autumn – Block 1 – Step 9 – Understand π as a ratio

Question	Answer
1	a) 6 cm b) 24 cm c) 6 : 24 or 1 : 4 d) Yes - for a square. e) It will be the same for a rhombus as that also has four sides equal in length.
2	a) 10 cm b) 20 cm c) 2 mm d) 4 mm
3	15 cm – None of the other measurements show either the diameter or the radius.
4	a) 3.14 b) 1 : 3.14 c) 2 : 6.28 = 1 : 3.14 d) 4 : 12.56 = 1 : 3.14 e) They are all equivalent. f) For any circle, the ratio of the diameter : circumference can be written as 1 : 3.14 or, more accurately, 1 : π
5	Multiply both by d d : πd The circumference of a circle is equal to Pi multiplied by the diameter. C = πd
6	a) 12π cm or 37.68 cm to 2 d.p. b) 24π cm or 75.36 cm to 2 d.p. c) 8π cm or 25.12 cm to 2 d.p. d) 2$x\pi$ cm