

Year 7 Tutorial - 18

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1. Factorize.

a) $3x^2 - 9x$

b) $4x^2y + 6xy^2$

2. Simplify.

a) $2x^{\frac{1}{3}} \times 3x^{\frac{3}{4}}$

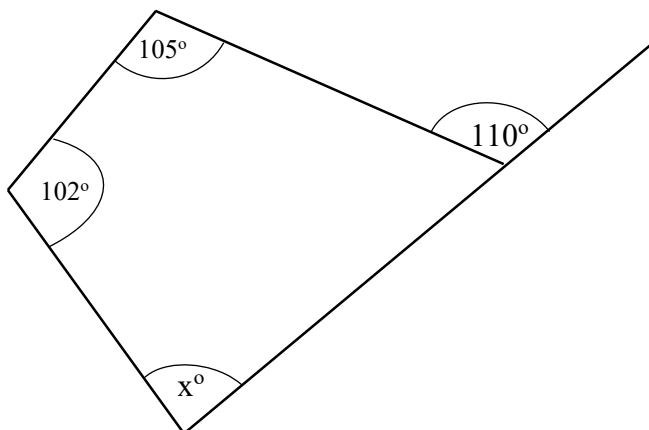
b) $\frac{x^2 \times x^{-\frac{1}{3}}}{x^{\frac{2}{5}}}$

3. Simplify.

a) $5 - 1\frac{1}{3} \times 2\frac{1}{4}$

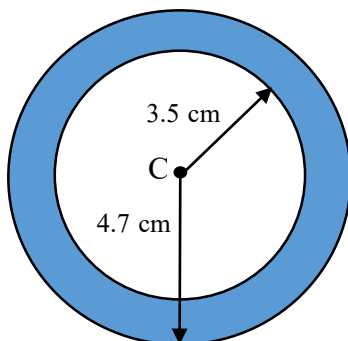
b) $3 + 2\frac{2}{5} \div 3\frac{3}{4}$

4.



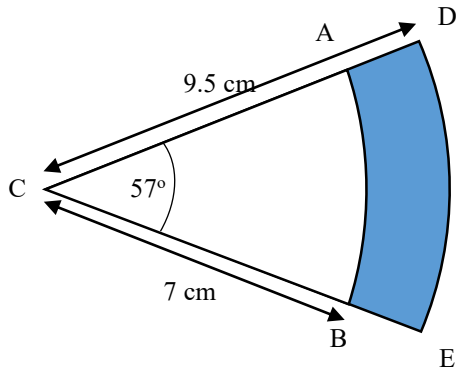
Find angle x° .

5.



C is the center of circles. Find the shaded area, correct to 1dp.

6.



a) Find the shaded area correct to 1dp.

b) Find the perimeter of the tape, ABED. Give the answer correct to 1dp.

7. Draw straight line for the equations.

a) $y = 3x - 4$, $-1 \leq x \leq 2$

b) $y = 5 - 2x$, $0 \leq x \leq 3$

8. Draw stem and leaf diagrams for the following data sets.

a) 32, 21, 27, 35, 33, 40, 41, 35, 26, 21, 43, 45, 47

b) 85, 73, 82, 83, 74, 76, 91, 92, 85, 73, 76, 78, 94, 93, 99

9. Draw stem and leaf diagrams for the following data sets.

a) 109, 105, 113, 114, 116, 122, 125, 117, 123, 116, 125

Key : 12|3 means 123

b) 2.5, 1.9, 2.1, 2.3, 1.8, 1.7, 1.8, 2.6, 2.4

Key : 2|5 means 2.5

10. Use stem and leaf diagram below to find, mode, median, average and range of the data.

5		1 2 3 5 7 7
6		0 2 2 4
7		2 3 4 5 5

Key : 5|1 means 51