

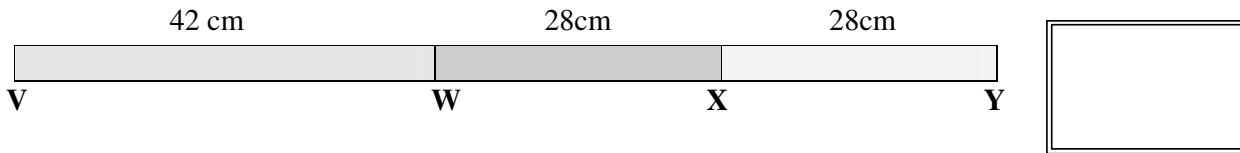
YEAR 7 BASIC ASSESSMENT

1. Put a tick in the boxes that describe the numbers:

| | Number | Natural | Integer | Rational | Irrational |
|----|---------------|---------|---------|----------|------------|
| a) | 98 | | | | |
| b) | $\frac{3}{4}$ | | | | |
| c) | -18.521 | | | | |
| d) | π | | | | |

2. $3 - (2 - 7) \times 2 = \boxed{}$ 3. $(5 - 8) \times (6 - 9) = \boxed{}$ 4. $-3(4 + 2) \times 4(1 - 5) + 6 = \boxed{}$

5. Express the ratio of length VW to the length of VX in its simplest form.



6. Solve the equations:

a) $2b + 3 = 6$ b) $3c - 2 + 1 = 5$ c) $9f + 3 = -6$ d) $3b - 6 = 2b + 4$

7. Use index notation to simplify:

a) $n \times n \times n \times n = \boxed{}$ b) $a^2 \times a^3 = \boxed{}$ c) $2ab \times a^2 \times b^2 = \boxed{}$

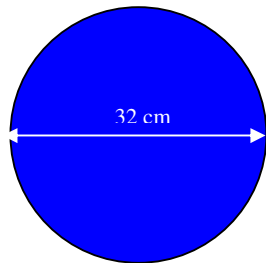
8. Simplify these fractions:

a) $2\frac{4}{5} \div 3\frac{1}{5} = \boxed{}$ b) $\frac{8ab}{2a} = \boxed{}$ c) $\frac{14b^2df^3}{2bd^2f} = \boxed{}$

9. Find the value of:

a) $3.7 \times 0.09 = \boxed{}$ b) $0.0554 \times 11.3 = \boxed{}$ c) $4.88 \div 1.22 = \boxed{}$

10.



a) What is the circumference of this circle?

b) What is the area of this circle?

11. Substitute the numbers on the left for h and write the answers on the right.

