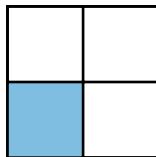


Ratio



**Ratios compare part to part.
They are written in the form 1st part : 2nd part : 3rd part etc.**

E.g. Express the ratio of the shaded area to the unshaded area



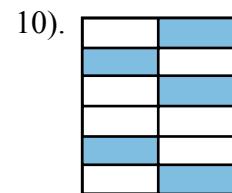
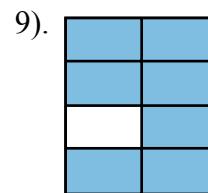
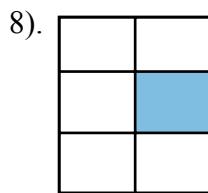
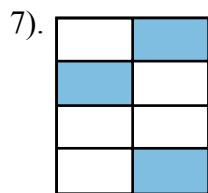
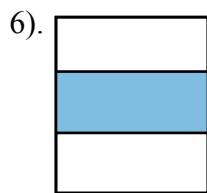
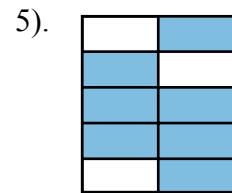
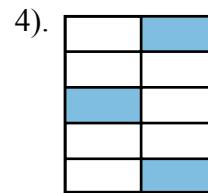
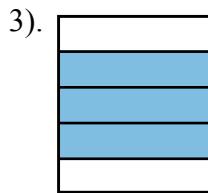
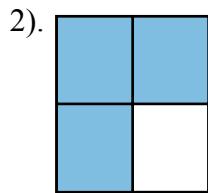
The ratio of shaded to unshaded is 1 to 3

1 : 3

Notice there are 4 parts altogether.



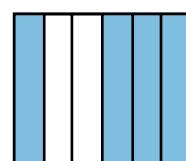
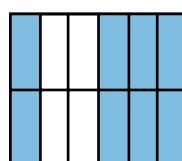
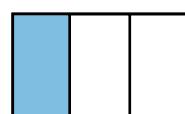
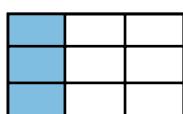
A). Write the ratio of the shaded to unshaded area in the following.



Ratios, like fractions, can be cancelled down.

E.g. 1. 3 : 6 cancels down to 1 : 2.

This can be seen in the two diagrams below.



B). Cancel down these ratios to their lowest terms.

- | | | | | |
|---------------------|--------------------|---------------------|---------------------|----------------|
| 1). 3 : 6 | 2). 10 : 15 | 3). 9 : 12 | 4). 5 : 10 | 5). 8 : 2 |
| 6). 12 : 6 | 7). 25 : 10 | 8). 12 : 16 | 9). 6 : 30 | 10). 20 : 30 |
| 11). 36 : 18 | 12). 48 : 16 | 13). 27 : 36 | 14). 28 : 21 | 15). 40 : 48 |
| 16). 12 : 60 | 17). 132 : 88 | 18). 24 : 72 | 19). 108 : 81 | 20). 144 : 120 |
| 21). 100 : 150 | 22). 110 : 90 | 23). 112 : 154 | 24). 80 : 112 | 25). 105 : 180 |
| 26). 95 : 114 | 27). 144 : 336 | 28). 320 : 256 | 29). 54 : 117 | 30). 145 : 85 |
| 31). 6 : 15 : 21 | 32). 8 : 16 : 32 | 33). 9 : 12 : 21 | 34). 12 : 18 : 36 | |
| 35). 9 : 18 : 45 | 36). 16 : 32 : 56 | 37). 36 : 48 : 72 | 38). 30 : 45 : 90 | |
| 39). 24 : 120 : 132 | 40). 60 : 75 : 135 | 41). 36 : 108 : 162 | 42). 88 : 154 : 242 | |

C). Leave all ratio answers in their lowest terms.

- This month there were 14 sunny days and 16 wet days. Find the ratio of sunny days to wet days.
- In a bag of sweets 10 are yellow and 15 blue. Find the ratio of yellow to blue sweets.
- A coach has room for 28 sitting and 16 standing passengers. Find the ratio of sitting to standing passengers.
- In a class there are 12 girls and 18 boys. Find the ratio of girls to boys in the class.
- In a bag of marbles there are 55 blue marbles and 45 green marbles. Find the ratio of blue to green marbles.

