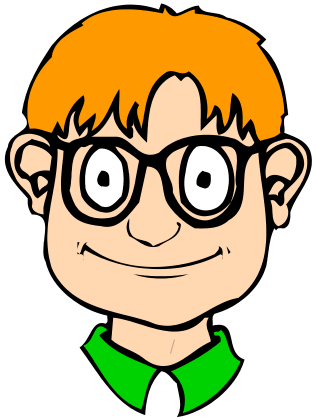
Lesson 6- Ratio

What do you need?

Pen and Paper

Blue Zone	Green Zone	Yellow Zone	Red Zone
 Going slow	 Good to go	 Caution Starting to lose control	 Stop! Out of control
E.g. sad, sick, tired, bored	E.g. happy, calm, focused, ok	E.g. worried, excited, annoyed	E.g. angry, terrified, elated



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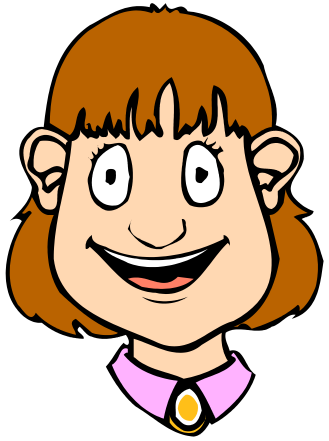

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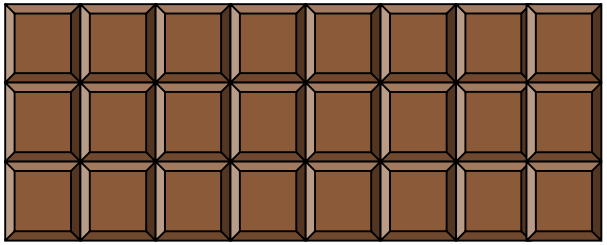

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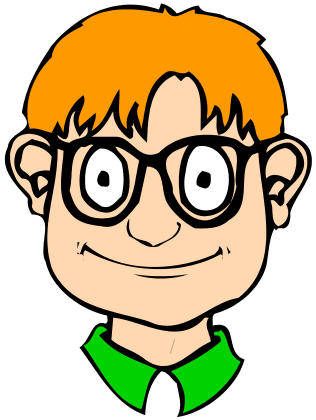

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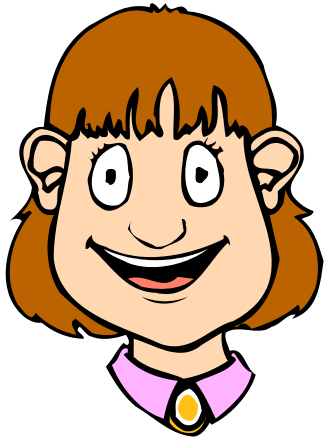

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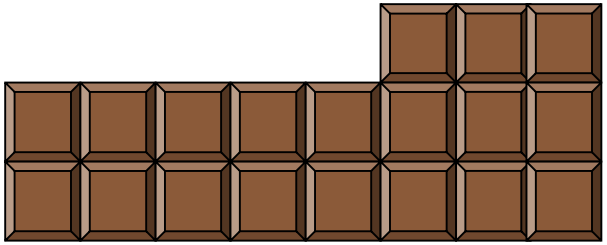

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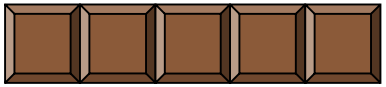

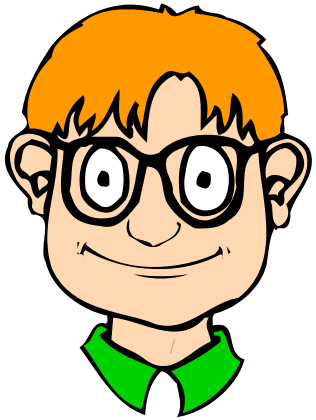

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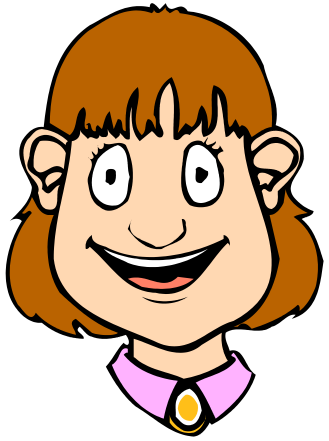

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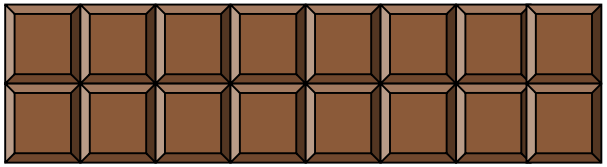

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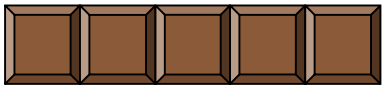

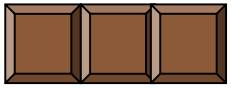

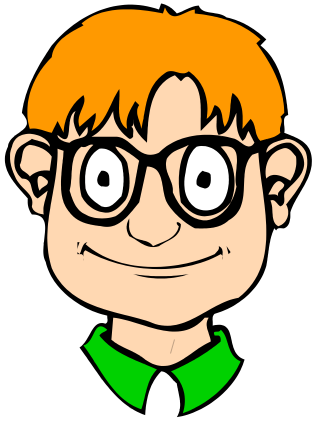

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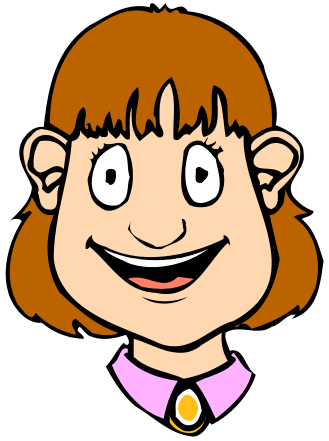

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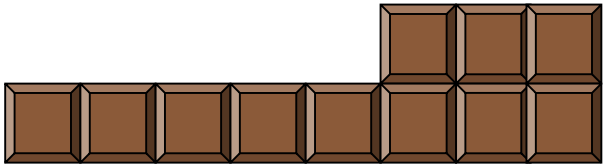

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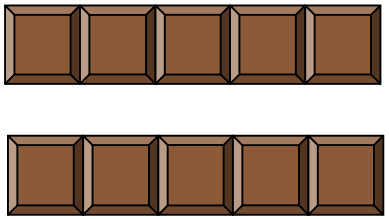

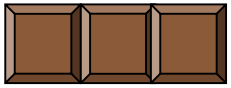

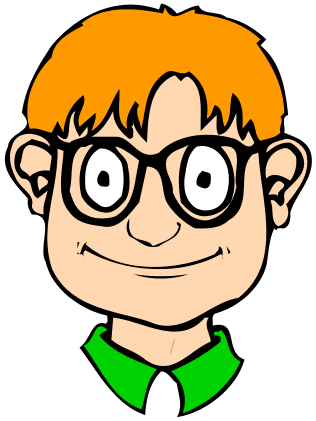

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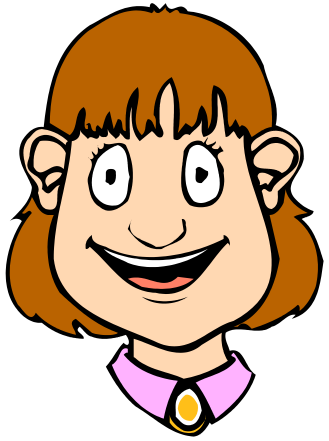

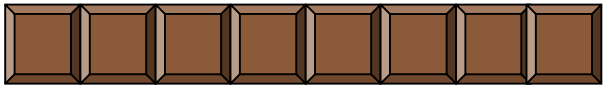

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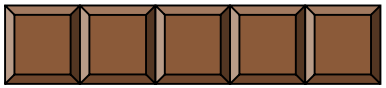

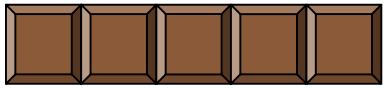

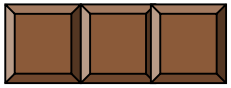

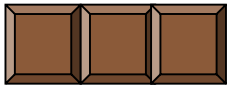

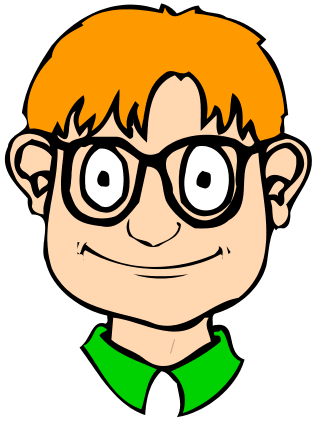

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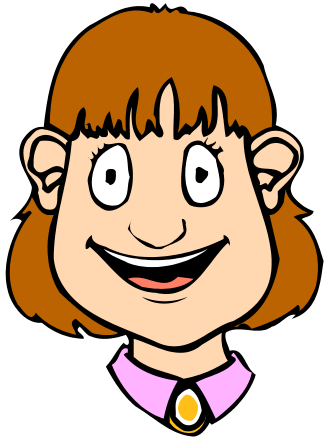

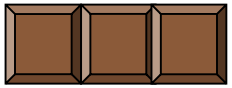

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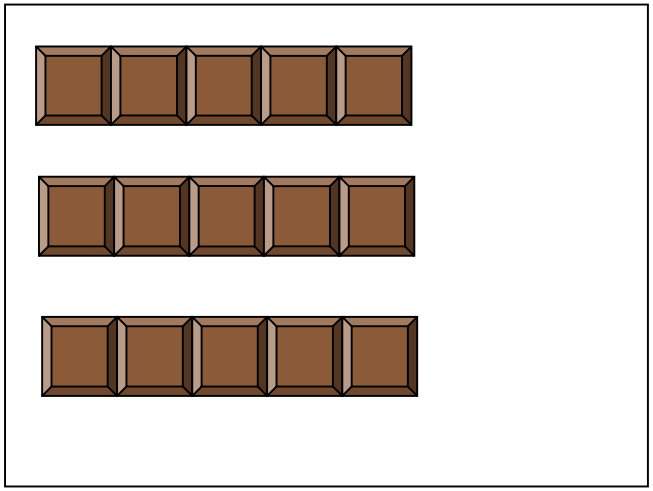

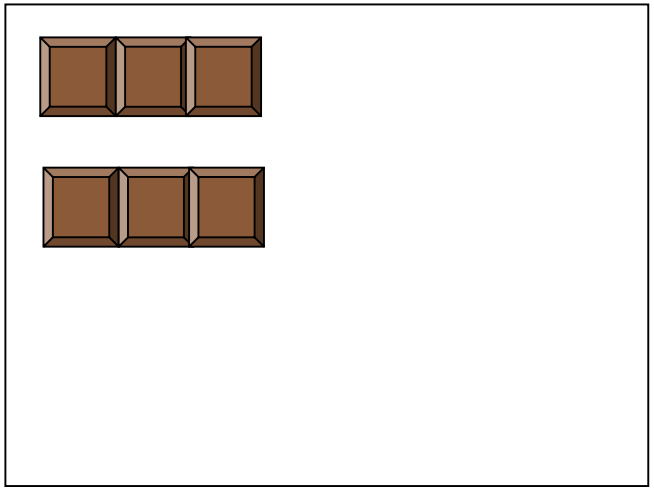

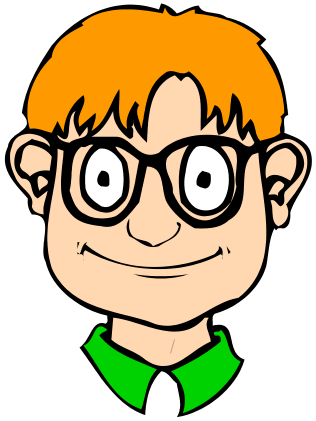

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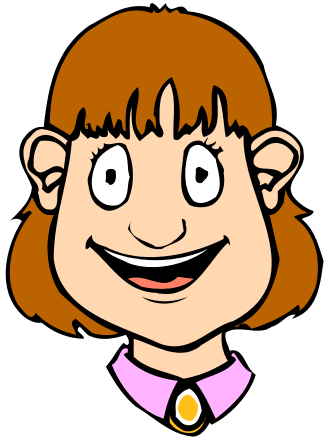

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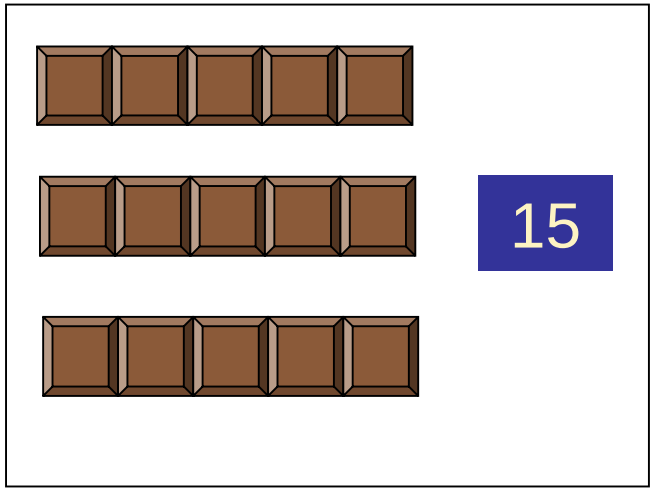

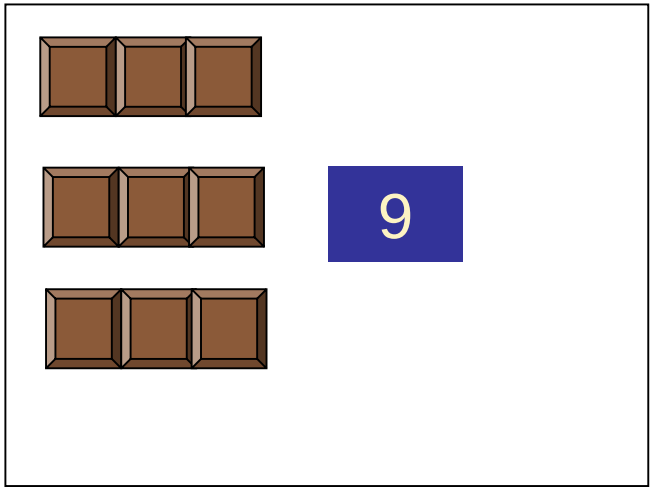

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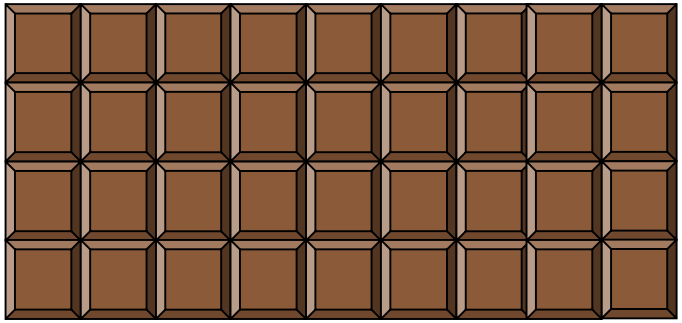

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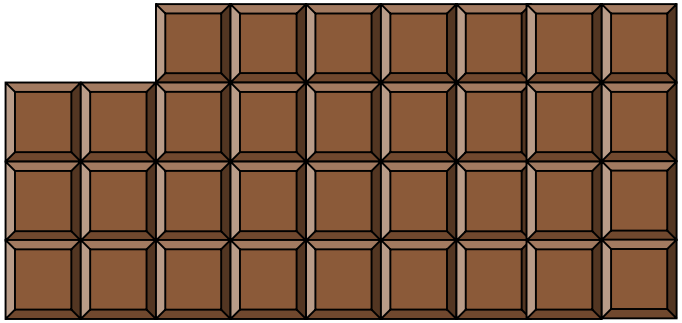

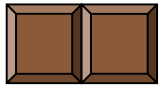

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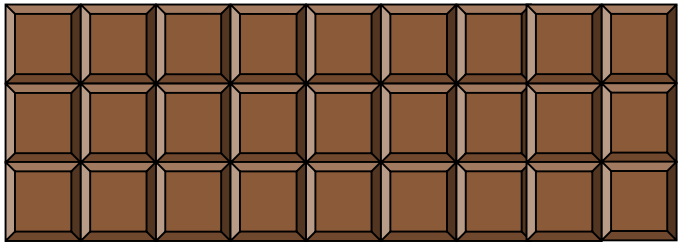

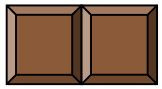

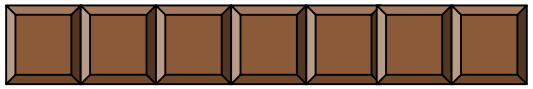

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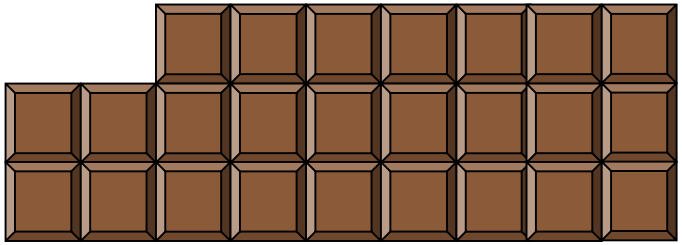

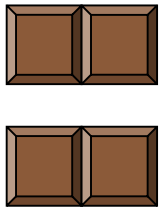

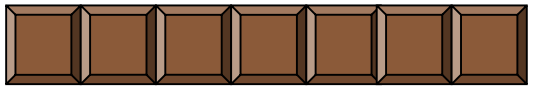

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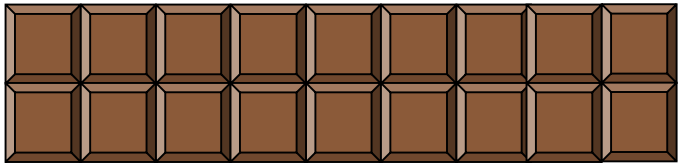

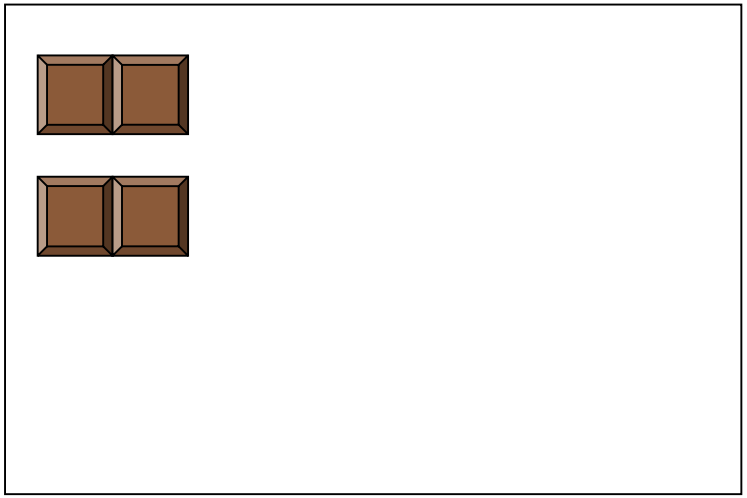

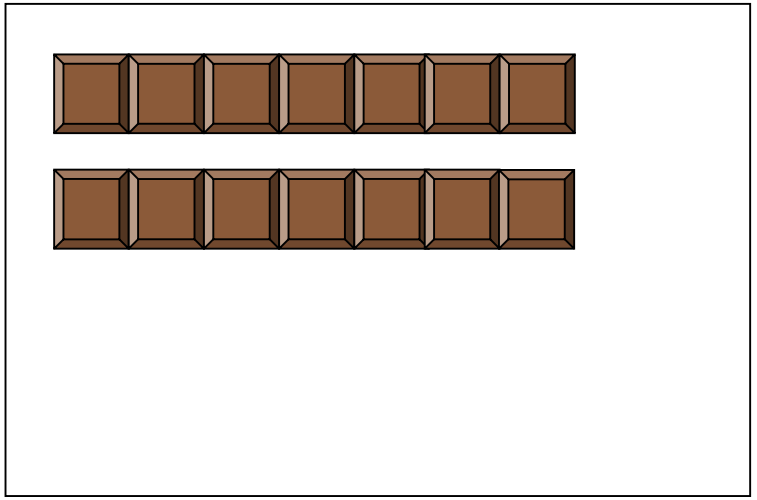

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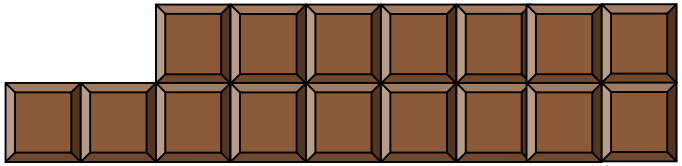

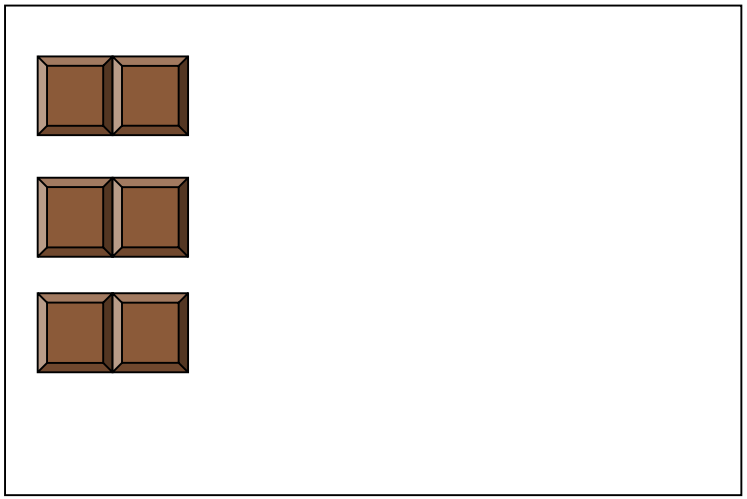

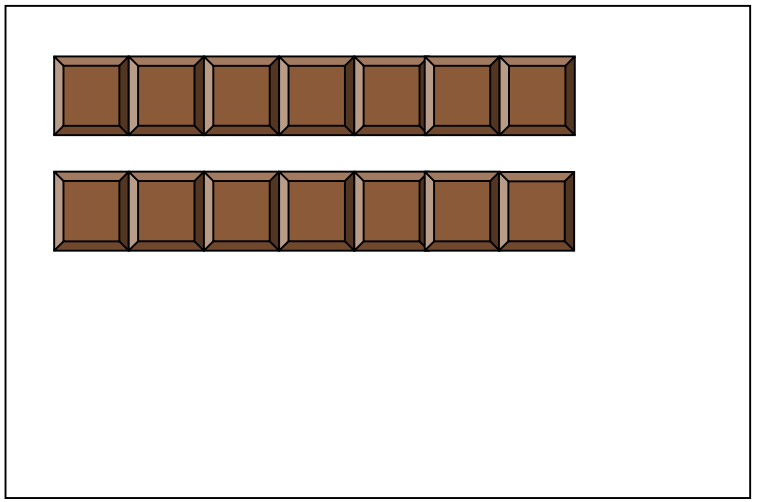

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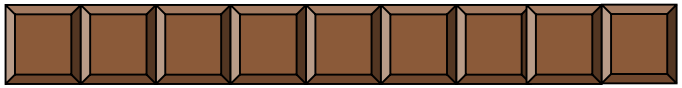

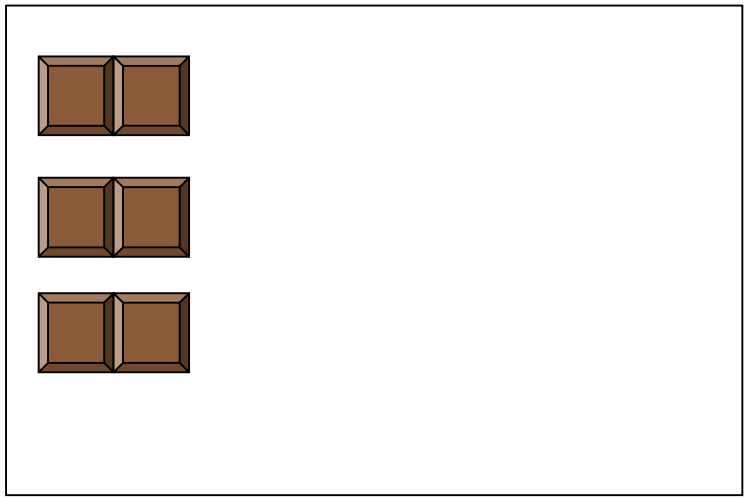

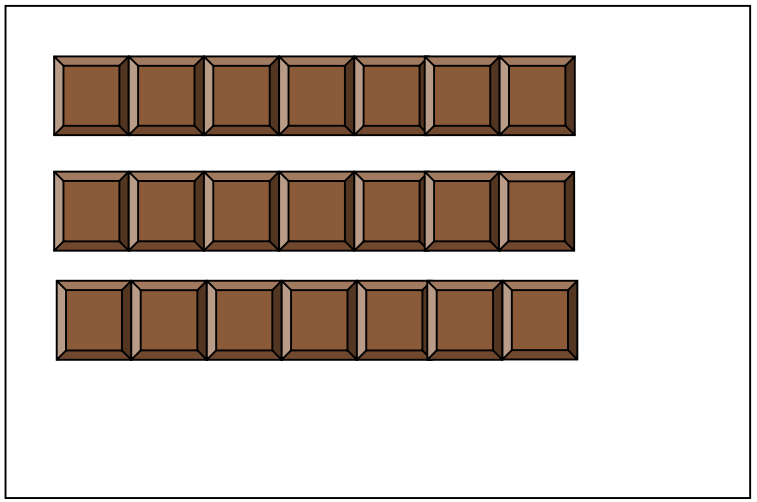

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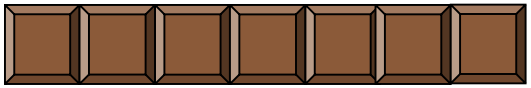

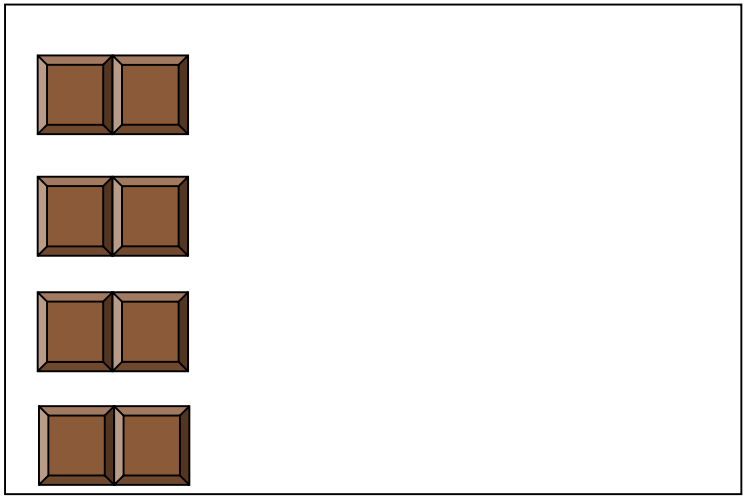

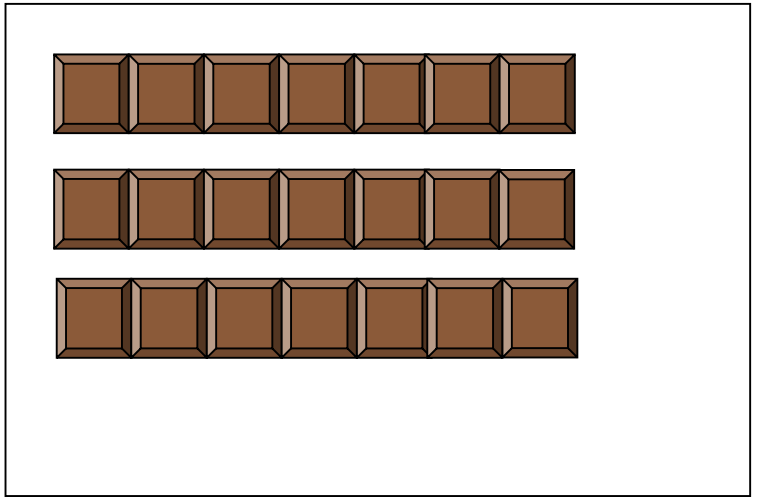

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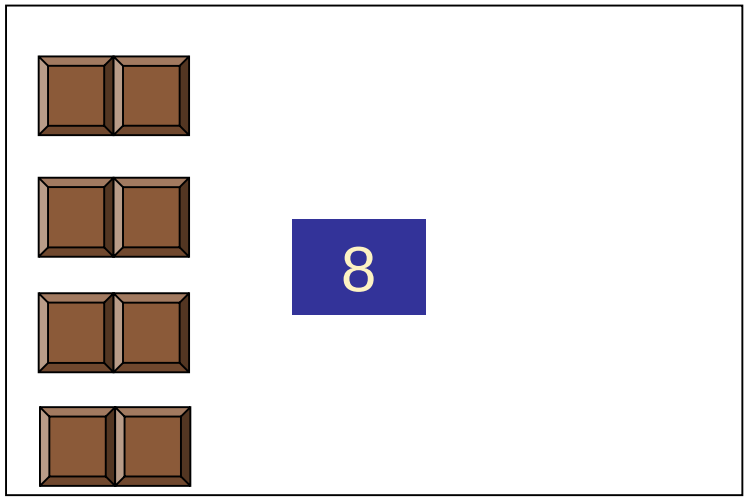
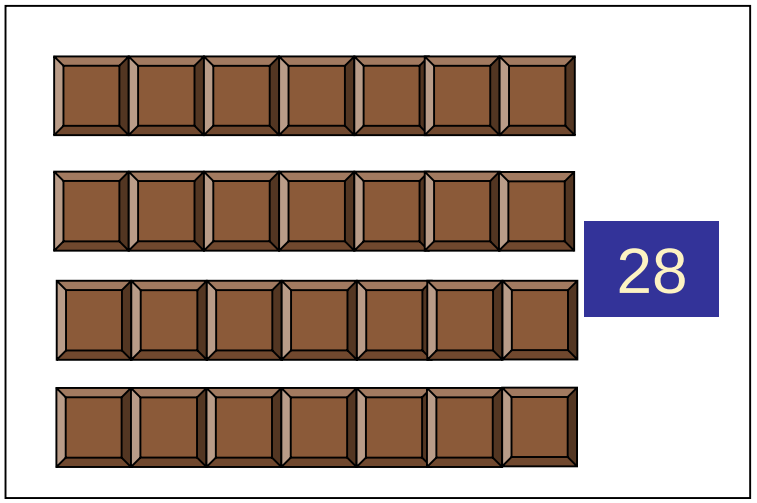
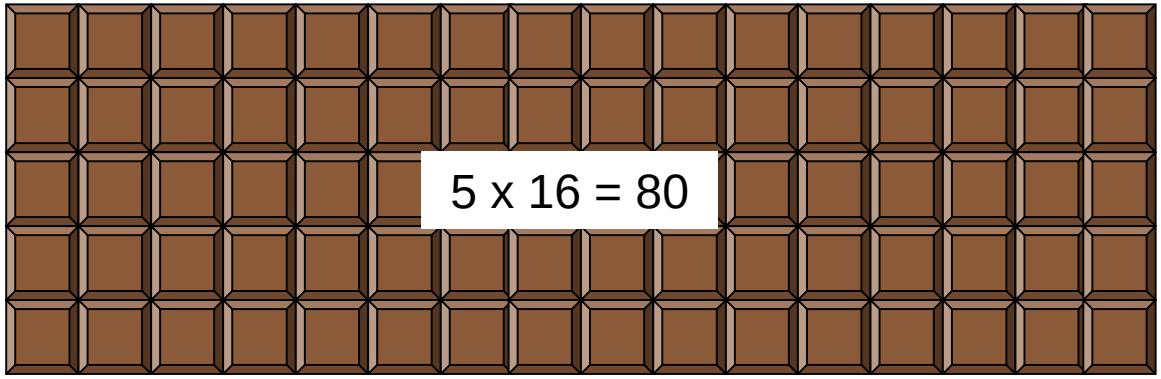




Sharing in a Given Ratio

Discuss the problem of using this method if Snoopy and Hippo had to share (the very nice) bar of chocolate below in the ratio 3 : 2.



So this method is not efficient when the quantity to be shared is large and/or the ratios are small. A more efficient method is desirable.

This can be achieved by considering what proportion/fraction of the whole bar they will each receive. In this example we can think of the bar as being divided into 5 parts.

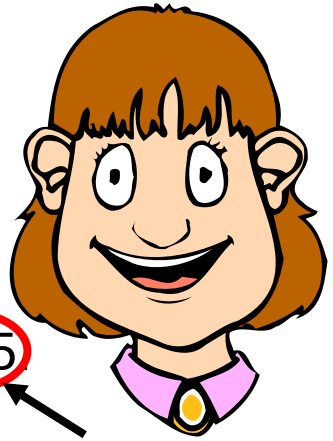
Snoopy will get 3 out of 5 parts and Hippo will get 2 out 5 parts.

So Snoopy gets $\frac{3}{5}$ of 80 = 48 pieces Hippo gets $\frac{2}{5}$ of 80 = 32 pieces

Check: 48 + 32 = 80 ✓

Sharing in a Given Ratio

Example Question 1



Simon and Jenny share £72 in the ratio of 3 : 5
How much do they each receive?

8 parts

Simon gets $\frac{3}{8}$ of £72 = £27

Jenny gets $\frac{5}{8}$ of £72 = £45

Check: 27 + 45 = 72 ✓

Example Question 2

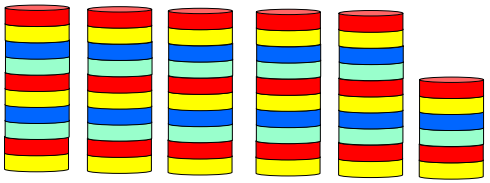
Snoopy and Hippo share 56 coloured discs in the ratio of 5 : 2 How many do they each receive?

7 parts

Snoopy gets $\frac{5}{7}$ of 56 = 40 discs

Hippo gets $\frac{2}{7}$ of 56 = 16 discs

Check: 40 + 16 = 56 ✓



1) Add the ratios together to find how many parts

2) Divide the total by how many parts altogether

3) Multiply by how parts each ‘person’ gets.

Share £100 in the ratio 4:6

1) 4 + 6 = 10

2)100 divided by 10 = 10

3) 4x10 = £40

6x20 = £60

1) Add the ratios together to find how many parts

2) Divide the total by how many parts altogether

3) Multiply by how parts each ‘person’ gets.

Share £28 in the ratio 2:5

1) 2 + 5 = 7

2) 28 divided by 7 = 4

3) 2x4 = £8
   5x4 = £20

1) Add the ratios together to find how many parts

2) Divide the total by how many parts altogether

3) Multiply by how parts each ‘person’ gets.

Share £35 in the ratio 1:4

1) 1 + 4 = 5

2) 35 divided by 5 = 7

3) 1x7 = £7
   4x7 = £28

Questions 1

Sharing in a Given Ratio

1. Share £48 between Alan and Barbara in the ratio 2 : 1

   £32 £16

2. Share £60 between Laura and Robert in the ratio 1 : 3

   £15 £45

3. Share 80 marbles between Stuart and Carl in the ratio 4 : 1

   64 16

4. Share 91 sweets between Peter and Becky in the ratio 4 : 3

   52 39

5. Share 70 coloured beads between Janet and Christine in the ratio 3 : 2

   42 28

6. Share £120 between Carly and Paul in the ratio 3 : 5

   £45 £75

Questions 2

Sharing in a Given Ratio

1. Share 350 ml of milk between a cat and her kitten in the ratio 4 : 3

200 ml 150 ml

2. Share 1.2 litres of milk between a dog and a cat in the ratio 7 : 5

700 ml 500 ml

3. Share 240 g of sweets between Alison and Stephen in the ratio 3 : 5

90 g 150 g

4. Share 120 g of cereal between Stuart and Julie in the ratio 3 : 7

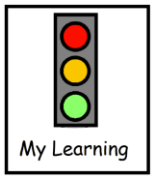
36 g 84 g

£2400 £3000

5. Paul is 12 and Gemma is 15. They share a £5400 inheritance from their aunty in the ratio of their ages. How much do they each receive?

£1275 £1445

6. John scored 15 points and Fiona scored 17 points in a TV quiz show. They shared the prize money of £2720 in ratio of points scored. How much did they each receive?



Traffic light your work today.

Thumbs down- I don't understand it
Thumbs across- I understand some of it
Thumbs up- I understand all of it

A further task will be on the website for you to complete later today – one merit for all who do ☺