

YEAR 8 MATHEMATICS WEEK 2 2020 (TERM 2)

Year: 8

Date: Monday 25 May 2020

STRAND: NUMBERS

TOPIC: Ratio

LESSON OUTCOME: At the end of this lesson student(s) should be able to solve simple problems involving ratios.

Instructions: Hi dear Parents/Guardians and students - In this Lesson students are going to solve simple problems involving ratios and do the selected questions for **Exercise 1.8**.

*[Note that all the Quizzes/Test and or Assignment will be based on the selected questions for each exercise. These lessons are designed for **one hour per Lesson**.]*

What to do: Do the following selected questions

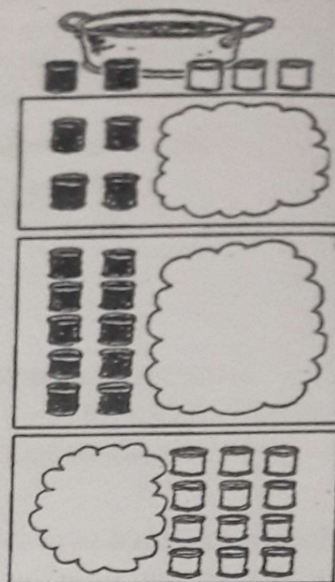
Exercise 1.8: Q4; Q5; Q6

Solutions: Solutions will be available online via

<https://www.facebook.com/centralschoolemergencyforum/posts/108720557434149>

4. John makes a grey colour.
He mixes 2 tins of black with 3 tins of white.
The ratio of black to white is 2 to 3.

- (a) John needs twice as much grey paint.
He uses 4 tins of black paint.
How many tins of white does he use?
- (b) Jane wants a lot of grey paint.
She uses 10 tins of black paint.
How many tins of white does she use?
- (c) John now uses 12 tins of white.
How many tins of black should he use?



5. This recipe for Beef Soup is designed to serve five people.

Beef Soup (Serves 5)	
1kg beef	1½ l water
60g butter	1 beef stock cube
2 onions	1 tablespoon tomato paste
2 carrots	½ teaspoon thyme
1 clove garlic	2 tablespoons rice

Copy and complete the table to show the quantities needed to feed 10, 25 and 50 people.

	10 people	25 people	50 people
Beef			
Butter			
Onions			
Carrots			
Clove of garlic			
Water			
Beef stock cube			
Tomato paste			
Thyme			
Rice			

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6. From a survey it was found that for every person who said they were left-handed, four said they were right-handed.

If 80 of the people questioned said they were right-handed, how many people claimed to be left-handed?



7. Orange drink can be made by mixing cans of concentrated juice with water in the ratio of 1:3 (1 can of orange juice to 3 cans of water).

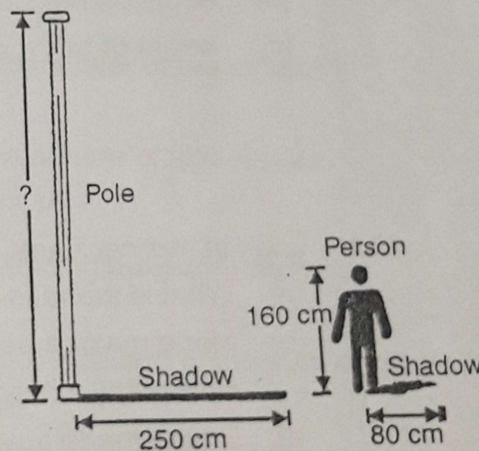


How many cans of water would be needed if you used the following amounts of concentrate:

- (a) 2 cans?
(c) 10 cans?

(b) 5 cans?

8. The diagram on the right shows the shadow cast by a pole, and by a person standing besides it. Use your knowledge of ratios to calculate the height of the pole.



9. Write a sentence to answer each of the following:

- (a) Would it matter at what time of day the shadows were measured?
(b) Could you calculate the height of the pole using a person of any height?