

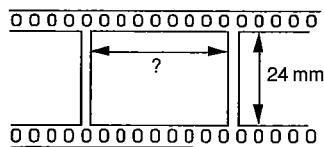
M7
2014/15
AV
12/5/17

Mathematics Assessment Program

Middle School Mathematics

Short Tasks: Ratios and Proportional Relationships

1. This negative, when developed will produce a 4" by 6" photograph. What is the length of each negative, if the width is 24 millimeters?



2. The spin on a washing machine takes out 35% of the water in the clothes. The clothes in the washing machine contain 3 pints of water. How much water is left after a spin?
3. Hugh uses 13 grams of coffee powder to each liter of water. He has a cup which holds 0.3 liters of water. How much coffee powder should he use?
4. On average, I sleep about 7 hours 45 minutes each day. So, during one year, I sleep for
 $7.45 \times 365 = 2719.25$ or about 2700 hours.
This calculation is not correct. What is the correct answer?
5. John's collection contains US, Indian and British stamps. If the ratio of US to Indian stamps is 5 to 2, and the ratio of Indian to British stamps is 5 to 1, what is the ratio of US to British stamps.
6. The price of a cycle is reduced by 25 per cent. The new price is reduced by a further 20 per cent. Find the single reduction the two reductions together are equal to.
7. A dress on sale in a shop is marked at \$D. During the discount sale its price is reduced by 15%. Staff are allowed a further 10% reduction on the discounted price. If a staff member buys the dress what will she have to pay in terms of D?