

Name:

These ten questions are worth 5 points each. To get all 5 points it is very important that you show clearly all your working out and reasoning. Put a box around the answer. You may not use a calculator or phone during the test.

Q1. Simplify the ratio: 3.6 to 1.2

Q2. Simplify the ratio: 20 minutes to 3 hours

Q3. Are the ratios $\frac{18}{12}$ and $\frac{30}{20}$ equal?

Q4. Solve: $\frac{1}{7} = \frac{9}{x}$

Q5. Solve and write the answer as a mixed number: $\frac{x}{9} = \frac{2}{5}$

Q6. What percent of 250 is 5?

Q7. 35% of what number is 7?

Q8. A car goes 125 miles on 6 gallons of gas. How far does it go on 24 gallons of gas?

Q9. On a map, 2 inches represents 25 miles. If two towns are 6 inches apart on the map, what is the real distance between them?

Q10. For these similar triangles, $\triangle ABC$ and $\triangle DEF$, find the length of the missing side.

