

Simplify.

$$1. \quad \frac{4}{7} * \frac{15}{16} * \frac{8}{25} = \frac{6}{35}$$

Solve the proportion.

$$2. \quad \frac{3}{x-3} = \frac{6}{7}$$

$$x = 6.5$$

Solve for x.

$$3. \quad \frac{2x}{3} + 7 = 9$$

$$x = 3$$

$$4. \quad \frac{2x+7}{3} = 9$$

$$x = 10$$

Simplify using the order of operations.

$$5. \quad (7 - 3)^2 + 28 - 28 \div 7 * 3$$

$$32$$

Solve using dimensional analysis.

6. A tennis ball weighs 0.057 kilograms. How much does it weigh in ounces?

$$2.03 \text{ oz.}$$

7. Jeremy and Scott are supposed to wrestle at the 106 weight class tonight. They can only do this if they both weigh in at 106 pounds or less before the match. Jeremy weighed in at 48,625.92 grams and Scott weighed in at 0.0528 tons.

Will they be able to wrestle? If not, who is disqualified?

Scott yes

105.6 lbs.

Jeremy no

107.11 lbs.

Solve using dimensional analysis.

8. John Isner can serve the tennis ball a whopping 149.9 miles per hour. How fast is that in feet per second?

219.85 ft./sec.

9. Your heart can pump 0.17 pints per second. How many gallons does it pump per minute?

1.275 gal/min