Simplify.

1. 
$$\frac{6}{7} * \frac{5}{8}$$

2. 
$$\frac{2}{9} * \frac{12}{49} * \frac{7}{2}$$

Solve the proportions.

3. 
$$\frac{2}{5} = \frac{x}{20}$$

4. 
$$\frac{3}{8} = \frac{9}{2x}$$

5. 
$$\frac{x-4}{5} = \frac{3}{2}$$

Simplify using the order of operations.

6. 
$$12 + 21 \div 3 * 2 - 6$$

7. 
$$4(2^3 - 18 \div 6)$$

Solve the equations.

8. 
$$7x - 8 = 48$$

9. 
$$\frac{x}{9} + 3 = 6$$

Match the following with their appropriate unit of measurement by writing the letter next to it (use each once).

10. \_\_\_\_\_ Height of a cow

a. mm

11. \_\_\_\_\_ Length of a cellphone

b. in

12. \_\_\_\_\_ Height of a house

c. ft

13. \_\_\_\_\_ Distance across lowa

d. yd

14. \_\_\_\_\_ Width of a fingernail

e. miles

Match the following with their logical measurement by writing the letter next to it (use each once).

15. \_\_\_\_\_ Width of a donut

a. 22 yd

16. \_\_\_\_ Height of I-74 bridge

b. 162 in

17. \_\_\_\_ Height of a teacher

c. 38 ft

18. \_\_\_\_\_ Width of a garage door

d. 173 cm

19. \_\_\_\_\_ Length of a school bus

e. 89 mm

20. If someone told me that it took them 10,000 seconds to do something, it would sound silly.

- a. What unit of time would make more sense?
- b. How would you change it to that unit of time (explain and show work below)?