Basic Math Homework #12

1) Simplify:
$$4\frac{2}{24} \cdot 2\frac{1}{49} \div 2\frac{1}{5}$$

2) Simplify:
$$\sqrt{4\frac{21}{25}} \div \left(1\frac{7}{15}\right)^2$$

3) Simplify:
$$5\frac{5}{8} - 1\frac{1}{6} - 2\frac{7}{18}$$

- 4) Convert $7\frac{3}{8}$ to an improper fraction.
- 5) If a class consists of 36 students and 20 are girls, what fraction are boys?

6) Simplify:
$$\sqrt{5\frac{4}{9}} + 1\frac{3}{33}\left(3\frac{1}{6} - 2\frac{5}{9}\right) - 1\frac{2}{3}$$

7) Simplify:
$$\frac{\frac{5}{8} + \frac{7}{12}}{\frac{2}{9} - \frac{1}{24}}$$

8) If Mike walks $6\frac{5}{48}$ miles on Thursday and $5\frac{1}{64}$ miles on Friday, how far did he walk?

9) Simplify:
$$6\frac{2}{48} \div \left(4\frac{5}{8} + 1\frac{5}{12}\right) + \left(7\frac{9}{10}\right)^0 - \sqrt{2\frac{1}{4}}$$

10) Simplify:
$$\frac{\frac{11}{54} - \frac{7}{72}}{\frac{5}{18} - \frac{4}{81}}$$

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- 11) After a $9\frac{7}{12}$ pound roast was trimmed of fat, it weighed $7\frac{5}{18}$ pounds. How much of the roast was fat?
- 12) Simplify: $\left(6\frac{7}{12} 1\frac{2}{9}\right) \div \left(5\frac{3}{8} + 2\frac{4}{6}\right)$ 13) Simplify: $\frac{\frac{7}{48} + \frac{9}{64}}{\frac{5}{32} + \frac{1}{24}}$
- 14) If $8\frac{3}{4}$ pounds of beans are to be shared equally by 5 people, how many pounds of beans does each person receive?
- 15) Simplify: $4\frac{5}{9} \div 1\frac{4}{81} \cdot 3\frac{2}{5} \div 9\frac{1}{9}$ $3\frac{5}{9} - 2\frac{7}{12}$

16) Simplify:
$$\frac{9}{1\frac{1}{18} + 4\frac{5}{6}}$$

- 17) If a glass of water contains $9\frac{3}{8}$ ounces and there were $14\frac{2}{3}$ glasses consumed at a party, how many ounces of water were consumed?
- 18) Simplify: $\left(2\frac{6}{7} \cdot \frac{70}{140} 1\frac{3}{7}\right) \div \left(2\frac{1}{4} \div 5\frac{1}{8}\right)$

19) Simplify:
$$\frac{6-4\frac{1}{8}}{1\frac{1}{14}}$$

20) If Sarah has $25\frac{2}{3}$ yards of fabric on hand. If it takes $1\frac{2}{9}$ yards of fabric to make a skirt, how many skirts can she make?

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