

Math 221: Basic Statistics Practice Quiz #1A

Week #1

SHOW ALL YOUR WORK FOR FULL CREDIT!

Without the aid of a calculator, simplify the following expressions to a single fraction in lowest terms. In addition, convert each fraction to a percentage rounded to the nearest digits, e.g. $\frac{1}{2} + \frac{1}{8} = \frac{5}{8} = 63\%$.

(1) $2 - \frac{7}{20}$

(2) $1 + \frac{2}{5}$

(3) $\frac{22}{25} - \frac{3}{4}$

(4) $\frac{13}{40} + \frac{3}{8}$

(5) $\frac{3}{8} \times \frac{7}{6}$

(6) $\frac{11}{20} \div \frac{3}{5}$

(7) $\frac{3}{25} + \frac{1}{2} + \frac{1}{3}$

Math 221: Basic Statistics Practice Quiz #1B

Week #1

SHOW ALL YOUR WORK FOR FULL CREDIT!

Without the aid of a calculator, simplify the following expressions to a single fraction in lowest terms. In addition, convert each fraction to a percentage rounded to the nearest digits, e.g. $\frac{1}{2} + \frac{1}{8} = \frac{5}{8} = 63\%$.

(1) $2 - \frac{11}{20}$

(2) $3 + \frac{4}{5}$

(3) $\frac{21}{25} - \frac{1}{4}$

(4) $\frac{21}{40} + \frac{1}{8}$

(5) $\frac{5}{3} \times \frac{11}{20}$

(6) $\frac{8}{9} \div \frac{20}{3}$

(7) $\frac{1}{4} + \frac{2}{5} + \frac{2}{9}$

Math 221: Basic Statistics Practice Quiz #1C

Week #1

SHOW ALL YOUR WORK FOR FULL CREDIT!

Without the aid of a calculator, simplify the following expressions to a single fraction in lowest terms. In addition, convert each fraction to a percentage rounded to the nearest digits, e.g. $\frac{1}{2} + \frac{1}{8} = \frac{5}{8} = 63\%$.

(1) $3 - \frac{9}{20}$

(2) $1 + \frac{3}{5}$

(3) $\frac{12}{25} - \frac{1}{4}$

(4) $\frac{3}{40} + \frac{7}{8}$

(5) $\frac{3}{20} \times \frac{8}{9}$

(6) $\frac{7}{6} \div \frac{8}{3}$

(7) $\frac{3}{16} + \frac{5}{12} + \frac{1}{5}$

Math 221: Basic Statistics Quiz #1 Solutions

(1)

$$\begin{aligned} 2 - \frac{7}{20} &= \frac{40 - 7}{20} \\ &= \frac{33}{20} \\ &= 165\% \end{aligned}$$

(2)

$$\begin{aligned} 1 + \frac{2}{5} &= \frac{5 + 2}{5} \\ &= \frac{7}{5} \\ &= 140\% \end{aligned}$$

(3)

$$\begin{aligned} \frac{22}{25} - \frac{3}{4} &= \frac{88 - 75}{100} \\ &= \frac{13}{100} \\ &= 13\% \end{aligned}$$

(4)

$$\begin{aligned} \frac{13}{40} + \frac{3}{8} &= \frac{13 + 15}{40} \\ &= \frac{28}{40} = \frac{7}{10} \\ &= 70\% \end{aligned}$$

(5)

$$\begin{aligned} \frac{3}{8} \times \frac{7}{6} &= \frac{21}{48} \\ &= \frac{7}{16} \\ &= 44\% \end{aligned}$$

(6)

$$\begin{aligned} \frac{11}{20} \div \frac{3}{5} &= \frac{11}{20} \times \frac{5}{3} \\ &= \frac{55}{60} = \frac{11}{12} \\ &= 92\% \end{aligned}$$

(7)

$$\begin{aligned} \frac{3}{25} + \frac{1}{2} + \frac{1}{3} &= \frac{18 + 75 + 50}{150} \\ &= \frac{143}{150} \\ &= 95\% \end{aligned}$$

(1)

$$\begin{aligned} 2 - \frac{11}{20} &= \frac{40 - 11}{20} \\ &= \frac{29}{20} \\ &= 145\% \end{aligned}$$

(2)

$$\begin{aligned} 3 + \frac{4}{5} &= \frac{15 + 4}{5} \\ &= \frac{19}{5} \\ &= 380\% \end{aligned}$$

(3)

$$\begin{aligned} \frac{21}{25} - \frac{1}{4} &= \frac{84 - 25}{100} \\ &= \frac{59}{100} \\ &= 59\% \end{aligned}$$

(4)

$$\begin{aligned} \frac{21}{40} + \frac{1}{8} &= \frac{21 + 5}{40} \\ &= \frac{26}{40} = \frac{13}{20} \\ &= 65\% \end{aligned}$$

(5)

$$\begin{aligned} \frac{5}{3} \times \frac{11}{20} &= \frac{55}{60} \\ &= \frac{11}{12} \\ &= 92\% \end{aligned}$$

(6)

$$\begin{aligned} \frac{8}{9} \div \frac{20}{3} &= \frac{8}{9} \times \frac{3}{20} \\ &= \frac{24}{180} = \frac{2}{15} \\ &= 13\% \end{aligned}$$

(7)

$$\begin{aligned} \frac{1}{4} + \frac{2}{5} + \frac{2}{9} &= \frac{45 + 72 + 40}{180} \\ &= \frac{157}{180} \\ &= 87\% \end{aligned}$$

(1)

$$\begin{aligned} 3 - \frac{9}{20} &= \frac{60 - 9}{20} \\ &= \frac{51}{20} \\ &= 255\% \end{aligned}$$

(2)

$$\begin{aligned} 1 + \frac{3}{5} &= \frac{5 + 3}{5} \\ &= \frac{8}{5} \\ &= 160\% \end{aligned}$$

(3)

$$\begin{aligned} \frac{12}{25} - \frac{1}{4} &= \frac{48 - 25}{100} \\ &= \frac{23}{100} \\ &= 23\% \end{aligned}$$

(4)

$$\begin{aligned} \frac{3}{40} + \frac{7}{8} &= \frac{3 + 35}{40} \\ &= \frac{38}{40} = \frac{19}{20} \\ &= 95\% \end{aligned}$$

(5)

$$\begin{aligned} \frac{3}{20} \times \frac{8}{9} &= \frac{24}{180} \\ &= \frac{2}{15} \\ &= 13\% \end{aligned}$$

(6)

$$\begin{aligned} \frac{7}{6} \div \frac{8}{3} &= \frac{7}{6} \times \frac{3}{8} \\ &= \frac{21}{48} = \frac{7}{16} \\ &= 44\% \end{aligned}$$

(7)

$$\begin{aligned} \frac{3}{16} + \frac{5}{12} + \frac{1}{5} &= \frac{45 + 100 + 48}{240} \\ &= \frac{193}{240} \\ &= 80\% \end{aligned}$$

Math 221: Basic Statistics Practice Quiz #1E

Week #1

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Without the aid of a calculator, simplify the following expressions to a single fraction **in lowest terms**. In addition, convert each fraction to a percentage rounded to the nearest percent, e.g.

$$\frac{1}{2} + \frac{1}{8} = \frac{5}{8} = 63\%.$$

$$(1) 5 + \frac{13}{50}$$

$$(2) 2 - \frac{4}{5}$$

$$(3) \frac{17}{20} - \frac{12}{25}$$

$$(4) \frac{7}{30} + \frac{4}{15}$$

$$(5) \frac{3}{8} \times \frac{4}{7}$$

$$(6) \frac{5}{18} \div \frac{25}{6}$$

$$(7) \frac{4}{25} + \frac{1}{6} + \frac{1}{30}$$