

فرض مراقبة عدد 03 الرياضيات سنة الثامنة مع الاصلاح

التمرين الأول:

أكمل بصواب أو خطأ

(أ) $\left(-\frac{4}{9}\right) \times \left(-\frac{5}{9}\right) = \frac{20}{9}$

(ب) $\frac{3}{5} = \frac{1}{-\frac{5}{3}}$

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

(د) $\frac{1}{\frac{1}{2} + \frac{1}{3}} = 2 + 3$

(هـ) $-\frac{0,25}{-\frac{3}{2}} = \frac{1}{6}$

التمرين الثاني:

احسب العدد الكسري a في كل حالة

(أ) $a \times \frac{4}{7} = 1$

(ب) $\left(-\frac{8}{9}\right) \times a = 1$

(ج) $\left(\frac{5}{8} - \frac{3}{4}\right) \times a = 1$

التمرين الثالث:

احسب

(أ) $a = \frac{\frac{2}{4}}{\frac{3}{5}}$

(ب) $b = \frac{\frac{5}{4} - \frac{2}{3}}{\frac{3}{2}}$

(و) $f = \frac{1}{\frac{1}{5} + \frac{5}{7}}$

(هـ) $e = \frac{1}{-\frac{1}{2} + \frac{1}{3}}$

(د) $d = 1 + \frac{-\frac{2}{7}}{\frac{14}{49}}$

(ج) $c = \frac{\frac{2}{3} - \frac{2}{4}}{\frac{3}{5}}$

(ن) $g = \frac{\frac{2}{3} - 3 \times \frac{5}{6}}{\frac{3}{2} \times \frac{5}{6} - \frac{9}{10}}$

CORRECTION

التمرين الاول:

(أ) خطأ / (ب) خطأ / (ج) صواب / (د) خطأ / (هـ) صواب

التمرين الثاني:

$$a = \frac{7}{4} \text{ يعني } a \times \frac{4}{7} = 1 \text{ (أ)}$$

$$a = -\frac{9}{8} \text{ يعني } \left(-\frac{8}{9}\right) \times a = 1 \text{ (ب)}$$

$$\left(\frac{5}{8} - \frac{6}{8}\right) \times a = 1 \text{ يعني } \left(\frac{5}{8} - \frac{3}{4}\right) \times a = 1 \text{ (ج)}$$

$$a = -8 \text{ يعني } -\frac{1}{8} \times a = 1$$

التمرين الثالث:

احسب

$$a = \frac{\frac{2}{3}}{\frac{4}{5}} = \frac{2}{3} \times \frac{5}{4} = \frac{5}{6} \text{ (أ)}$$

(ب)

$$b = \frac{\frac{5}{4} - \frac{2}{3}}{\frac{2}{3}} = \frac{\frac{15}{12} - \frac{8}{12}}{\frac{2}{3}} = \frac{\frac{7}{12}}{\frac{2}{3}} = \frac{7}{12} \times \frac{3}{2}$$
$$= \frac{7 \times 3}{4 \times 3 \times 2} = \frac{7}{8}$$

$$c = \frac{\frac{2}{3} - \frac{2}{5}}{\frac{4}{5}} = 2 \times \frac{4}{3} - 2 \times \frac{5}{3} = \frac{8}{3} - \frac{10}{3} = -\frac{2}{3} \text{ (ج)}$$

$$d = 1 + \frac{-\frac{2}{7}}{\frac{14}{49}} = 1 + \left(-\frac{2}{7}\right) \times \frac{49}{14} = 1 - \frac{2 \times 7 \times 7}{7 \times 2 \times 7} \text{ (د)}$$
$$= 1 - 1 = 0$$

$$e = \frac{1}{-\frac{1}{2} + \frac{1}{3}} = \frac{1}{-\frac{3}{6} + \frac{2}{6}} = \frac{1}{-\frac{1}{6}} = -6 \quad (2)$$

(3)

$$f = \frac{1}{\frac{1}{5} + \frac{1}{7}} = \frac{1}{\frac{7}{5} + \frac{1}{5} \times \frac{1}{7}}$$

$$= \frac{1}{\frac{7}{5} + \frac{1}{35}} = \frac{1}{\frac{49}{35} + \frac{1}{35}} = \frac{1}{\frac{50}{35}} = \frac{10}{5}$$

(3)

$$g = \frac{\frac{2}{3} - 3 \times \frac{5}{6}}{\frac{3}{2} \times \frac{5}{6} - \frac{9}{10}} = \frac{\frac{2}{3} - \frac{5}{2}}{\frac{3}{5} - \frac{9}{10}}$$

$$= \frac{\frac{4}{6} - \frac{15}{6}}{\frac{4}{10} - \frac{9}{10}} = \frac{-\frac{11}{6}}{-\frac{5}{10}} = -\frac{11}{6} \times \frac{20}{5}$$

$$= -\frac{11 \times 20}{2 \times 3 \times 7} = -\frac{110}{21}$$