

六年级数学上册

学习打卡：《分数简便计算》专项训练带答案

一、利用乘法交换律简算

$$\frac{14}{11} \times \frac{7}{23} \times \frac{11}{14}$$

$$= \frac{14}{11} \times \frac{11}{14} \times \frac{7}{23}$$

$$= 1 \times \frac{7}{23}$$

$$= \frac{7}{23}$$

$$\frac{7}{11} \times \frac{5}{14} \times 22$$

$$= \frac{7}{11} \times 22 \times \frac{5}{14}$$

$$= 14 \times \frac{5}{14}$$

$$= 5$$

二、乘法交换律、结合律综合应用

$$17 \times \frac{5}{9} \times \frac{5}{51} \times \frac{9}{5}$$

$$= (17 \times \frac{5}{51}) \times (\frac{5}{9} \times \frac{9}{5})$$

$$= \frac{5}{3} \times 1$$

$$= \frac{5}{3}$$

$$48 \times (\frac{7}{8} \times \frac{7}{4})$$

$$= 48 \times \frac{7}{8} \times \frac{7}{4}$$

$$= 42 \times \frac{7}{4}$$

$$= \frac{147}{2}$$

六年级数学上册

学习打卡：《分数简便计算》专项训练带答案

三、乘法分配律及逆用

$$\left(\frac{3}{5} - \frac{1}{2} + \frac{1}{3}\right) \times 30$$

$$= \frac{3}{5} \times 30 - \frac{1}{2} \times 30 + \frac{1}{3} \times 30$$

$$= 18 - 15 + 10$$

$$= 13$$

$$\left(\frac{13}{25} + \frac{13}{50}\right) \times \frac{20}{13} \times 125$$

$$= \frac{13}{25} \times \frac{20}{13} \times 125 + \frac{13}{50} \times \frac{20}{13} \times 125$$

$$= 100 + 50$$

$$= 150$$

四、小数化分数简算

$$\frac{7}{8} \times 0.25 + \frac{1}{4} \times \frac{1}{8} - \frac{1}{4}$$

$$= \frac{7}{8} \times \frac{1}{4} + \frac{1}{4} \times \frac{1}{8} - \frac{1}{4}$$

$$= \frac{1}{4} \times \left(\frac{7}{8} + \frac{1}{8} - 1\right)$$

$$= \frac{1}{4} \times 0$$

$$= 0$$

$$0.25 \times \frac{13}{12} \times \frac{3}{26} \times \frac{4}{9}$$

$$= \frac{1}{4} \times \frac{13}{12} \times \frac{3}{26} \times \frac{4}{9}$$

$$= \left(\frac{1}{4} \times \frac{4}{9}\right) \times \left(\frac{13}{12} \times \frac{3}{26}\right)$$

$$= \frac{1}{9} \times \frac{1}{8}$$

$$= \frac{1}{72}$$

六年级数学上册

学习打卡：《分数简便计算》专项训练带答案

五、整数×分数

①拆整数

$$27 \times \frac{15}{26}$$

$$= (26+1) \times \frac{15}{26}$$

$$= 26 \times \frac{15}{26} + 1 \times \frac{15}{26}$$

$$= 15 + \frac{15}{26}$$

$$15\frac{15}{26}$$

$$\frac{137}{139} \times 140$$

$$= \frac{137}{139} \times (139+1)$$

$$= \frac{137}{139} \times 139 + 1 \times \frac{137}{139}$$

$$= 137 + \frac{137}{139}$$

$$= 137\frac{137}{139}$$

②拆分数

$$11 \times \frac{47}{46}$$

$$= 11 \times \left(1 + \frac{1}{46}\right)$$

$$= 11 \times 1 + 11 \times \frac{1}{46}$$

$$= 11\frac{1}{46}$$

$$\frac{199}{200} \times 96$$

$$= \left(1 - \frac{1}{200}\right) \times 96$$

$$= 1 \times 96 - \frac{1}{200} \times 96$$

$$= 96 - \frac{12}{25} = 95\frac{13}{25}$$