① a) $(-2)\cdot[-5-6-9] = -2\cdot(-20) = 40$

b) $3-[(-3)-2\cdot(-3)] = 3-[-3+6] = 3-(+3) = 3-3 = 0$

c) $\left[\frac{5-3}{15}\cdot\frac{2}{3}\right]\cdot\frac{2}{5} : \left[\frac{3}{4}\cdot\left(\frac{1}{6}+\frac{18}{6}\right)\right] = \left(\frac{2}{15}\cdot\frac{2}{3}\right)\cdot\frac{2}{5} : \left(\frac{3}{4}\cdot\frac{19}{6}\right) =$

$= \frac{4}{45}\cdot\frac{2}{5} : \frac{19}{8} = \frac{8}{225} : \frac{19}{8} = \frac{64}{4275}$ | $\frac{3\cdot 19}{4\cdot 6} \rightarrow \frac{3}{6} = \frac{1}{2}$

d) $15:3+(-15-2\cdot 7) = 5-15-14 = -24$

② a) $6^2\cdot 6^2\cdot 6 = 6^{2+2+1} = 6^5$

b) $[(-8)^4\cdot(-8)^3]^2 : (-8)^5 =$

$= (-8)^8\cdot(-8)^6 : (-8)^5 = (-8)^9$

c) $\frac{7^{3+1}}{7^2} = 7^{3+1-2} = 7^2$

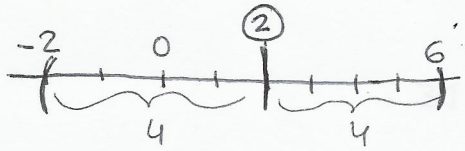
d) $\frac{5^2\cdot 5^2}{5^4} = 5^{2+2-4} = 5^0 = 1$

③ a) $0,12 = \frac{12}{100} = \frac{\cancel{2^2}\cdot 3}{5^2\cdot\cancel{2^2}} = \frac{3}{25}$

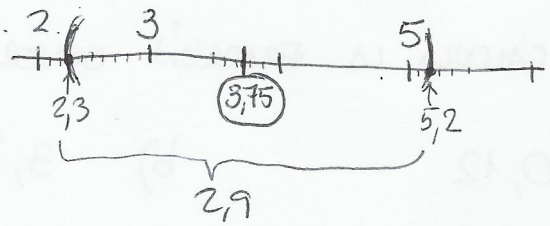
b) $3,\overline{61} = \frac{361-3}{99} = \frac{358}{99}$

c) $23,42\overline{7} = \frac{23427-2342}{900} = \frac{21085}{900} = \frac{4217}{180}$

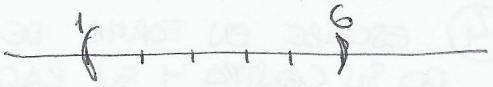
④ a) $(-2,6) = E(2, 4)$



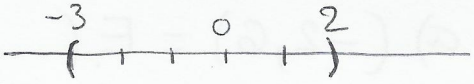
b) $(2,3 ; 5,2) = E(3,75 ; 1,45)$



⑤ $(1,6) = \{x\in\mathbb{R} \mid 1<x<6\}$



$(-3,2) = \{x\in\mathbb{R} \mid -3<x<2\}$



$(-\infty,7) = \{x\in\mathbb{R} \mid x<7\}$

$[-1,+\infty) = \{x\in\mathbb{R} \mid x>-1\}$