

Algebra I
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Part A		Part B		Part A		Part B	
2) 56	56	18) 0.47	$\frac{\sqrt{2}}{3}$	34) -10 mn			
4) 15	15	20) 2	2	36) r^3s^2			
6) 18.97	$6\sqrt{10}$	22) 0.67	$\frac{\sqrt{88}}{11}$	38) $ x^3 + 7\sqrt{x}$			
8) 10	10	24) 5.55	$\frac{20\sqrt{13}}{13}$	40) $12 a^2 $			
10) 15.65	$7\sqrt{5}$	26) 6.32	$2\sqrt{10}$	42) $9m\sqrt{5}$			
12) 140.01	$99\sqrt{2}$	28) 3.87	$\sqrt{15}$	44) $14 n^2 $			
14) 1.41	$\sqrt{2}$	30) 12.13	$6\sqrt{7} - \sqrt{14}$	46) $\frac{3 8^2 \sqrt{6}}{2 r }$			
16) $\frac{1}{2}$	$\frac{1}{2}$	32) -110.23	$-45\sqrt{6}$				

10) $\sqrt{7} \sqrt{35} = \sqrt{49 \cdot 5} = 7\sqrt{5}$

16) $\sqrt{\frac{1}{2}} \sqrt{\frac{2}{8}} = \frac{\sqrt{1}}{\sqrt{4}} = \frac{1}{2}$

18) $\sqrt{\frac{4}{9}} \sqrt{\frac{18}{3}} = \frac{\sqrt{2}}{\sqrt{9}} = \frac{\sqrt{2}}{3}$

20) $\sqrt{2 \frac{2}{5}} \sqrt{1 \frac{2}{3}} = \sqrt{\frac{124}{5}} \sqrt{\frac{8}{3}} = \sqrt{4} = 2$

26) $7\sqrt{\frac{40}{49}} = \frac{7\sqrt{40}}{\sqrt{49}} = \frac{7\sqrt{40}}{7} = \sqrt{40} = 2\sqrt{10}$

20) $\sqrt{2 \frac{2}{5}} \sqrt{1 \frac{2}{3}} = \sqrt{\frac{124}{5}} \sqrt{\frac{8}{3}} = \sqrt{4} = 2$

24) $\frac{5\sqrt{48}}{\sqrt{37}} = \frac{5 \cdot 4\sqrt{3}}{\sqrt{37}} = \frac{20\sqrt{3}}{\sqrt{37}}$

26) $7\sqrt{\frac{40}{49}} = \frac{7}{7} \cdot \frac{\sqrt{40}}{7} = \frac{\sqrt{40}}{7} = \frac{2\sqrt{10}}{7}$

28) $\frac{15\sqrt{61}}{\sqrt{90}} = \frac{15}{\sqrt{15}} \cdot \frac{\sqrt{15}}{\sqrt{15}} = \frac{15\sqrt{15}}{15} = \sqrt{15}$

28) $\frac{15\sqrt{61}}{\sqrt{90}} = \frac{15}{\sqrt{15}} \cdot \frac{\sqrt{15}}{\sqrt{15}} = \frac{15\sqrt{15}}{15} = \sqrt{15}$

30) $\sqrt{7(6-\sqrt{2})} = 6\sqrt{7} - \sqrt{14}$

36) $(-r\sqrt{r^3})(-5\sqrt{r^3}) = rs\sqrt{r^4s^2} = rs|r^2s| = r^3s^2$

46) $\frac{3\sqrt{\frac{3}{2r}} \sqrt{\frac{9}{r}}}{\sqrt{2r^2}} = \frac{3\sqrt{\frac{3 \cdot 9}{2r \cdot r}}}{\sqrt{2r^2}} = \frac{3\sqrt{\frac{27}{2r^2}}}{\sqrt{2r^2}} = \frac{3\sqrt{27}}{2|r|}$

30) $\sqrt{7(6-\sqrt{2})} = 6\sqrt{7} - \sqrt{14}$

38) $\sqrt{x(x^2+7)} = \sqrt{x^3+7\sqrt{x}}$

32) $(3\sqrt{5})(-\sqrt{16})(\sqrt{27}) = -3\sqrt{5 \cdot 2 \cdot 9 \cdot 3} = -3\sqrt{25 \cdot 9 \cdot 6} = -45\sqrt{6}$

46) $\frac{3\sqrt{\frac{3}{2r}} \sqrt{\frac{9}{r}}}{\sqrt{2r^2}} = \frac{3\sqrt{\frac{3 \cdot 9}{2r \cdot r}}}{\sqrt{2r^2}} = \frac{3\sqrt{\frac{27}{2r^2}}}{\sqrt{2r^2}} = \frac{3\sqrt{27}}{2|r|}$