

p. 723) 7-10, 13-18, 24

⑦  $5\sqrt{5b}$       ⑧  $2x$       ⑨  $9m\sqrt{m}$       ⑩  $4m^2\sqrt{2m}$

⑬  $2x\sqrt{7}$       ⑭  $3b^2\sqrt{6}$       ⑮  $2a^2b^2\sqrt{b}$       ⑯  $8s^2t\sqrt{t}$       ⑰  $mn$

⑱  $5x^2\sqrt{6y}$       ⑳ answer is not fully simplified  $\rightarrow 2\sqrt{18}$   
 $= 2\sqrt{2 \cdot 9}$   
 $= 2 \cdot 3\sqrt{2}$   
 $= 6\sqrt{2}$

Solutions

⑦  $\sqrt{125b} = \sqrt{25 \cdot 5 \cdot b} = 5\sqrt{5b}$

⑧  $\sqrt{4x^2} = 2x$

⑨  $\sqrt{81m^3} = \sqrt{81 \cdot m^2 \cdot m} = 9m\sqrt{m}$

⑩  $\sqrt{32m^5} = \sqrt{16 \cdot 2 \cdot m^4 \cdot m} = 4m^2\sqrt{2m}$

⑬  $\sqrt{14x} \cdot \sqrt{2x} = \sqrt{28x^2} = \sqrt{4 \cdot 7 \cdot x^2} = 2x\sqrt{7}$

⑭  $\sqrt{3b^3} \cdot \sqrt{18b} = \sqrt{54b^4} = \sqrt{9 \cdot 6 \cdot b^4} = 3b^2\sqrt{6}$

⑮  $2\sqrt{a^4b^5} = 2\sqrt{a^4 \cdot b^4 \cdot b} = 2a^2b^2\sqrt{b}$

⑯  $\sqrt{64s^4t^3} = \sqrt{64 \cdot s^4 \cdot t^2 \cdot t} = 8s^2t\sqrt{t}$

$$(16) \sqrt{64s^4t^3} = \sqrt{64 \cdot s^4 \cdot t^2 \cdot t} = 8s^2t\sqrt{t}$$

$$(17) \sqrt{m^2n} \cdot \sqrt{n} = \sqrt{m^2n^2} = mn$$

$$(18) \sqrt{75xy} \cdot \sqrt{2x^3} = \sqrt{150x^4y} = \sqrt{25 \cdot x^4 \cdot y} = 5x^2\sqrt{y}$$