

$$a) 3 \cdot 8^2 + 6 \cdot 5^2 - 3 \cdot 7^2 = (3 \cdot 64) + (6 \cdot 25) - (3 \cdot 49) = 192 + 150 - 147 = \underline{195} \checkmark$$

$$b) (9-3)^2 - (8-2)^2 - (7-1)^2 = 6^2 - 6^2 - 6^2 = 36 - 36 - 36 = \underline{-36} \checkmark$$

$$c) (6-3)^2 - (9-4)^2 + (5-2)^2 = 3^2 - 5^2 + 3^2 = 9 - 25 + 9 = \underline{-7} \checkmark$$

$$d) (6+2)^2 + (6-2)^2 = 8^2 + (6-4) = 64 + 2 = \underline{66} \checkmark$$

$$b) (-3)^2 \cdot 3^2 - (-6)^2 \cdot (-2)^2 = (9 \cdot 9) - (36 \cdot 4) = 81 - 144 = \underline{-63} \checkmark$$

$$c) (7^2 - 6^2) - (5^2 - 4^2) = (49 - 36) - (25 - 16) = 13 - 9 = \underline{4} \checkmark$$

$$a) \sqrt{4 \cdot 7 + 36} = \sqrt{28 + 36} = \sqrt{64} = \underline{8} \checkmark$$

$$b) \sqrt{11 \cdot 8 - 7} = \sqrt{88 - 7} = \sqrt{81} = \underline{9} \checkmark$$

$$c) \sqrt{443 - 27 \cdot 5 + 16} = \sqrt{443 - 135 + 16} = \sqrt{324} = \underline{18} \checkmark$$

$$a) (8-6)^2 = 2^2 = \underline{4} \checkmark$$

$$b) (16-19)^2 = 3^2 = \underline{9} \checkmark$$

$$c) (12^2 - 11^2 - 4)^2 = (144 - 121 - 4)^2 = 19^2 = \underline{361} \checkmark$$

$$a) \frac{16^2 - 56}{10^2 \cdot (4^2 - 2^2)} = \frac{256 - 56}{100(16-4)} = \frac{200}{100 \cdot 12} = \frac{200}{1200} = \underline{\frac{1}{6}} \checkmark$$

$$b) \left(\frac{4^2 - 5^2}{3^2}\right)^2 = \left(\frac{16 - 25}{9}\right)^2 = \frac{-9}{9} = \underline{-1} \checkmark$$

$$c) \frac{6^2 + 2^2}{10(4-5)^2} = \frac{36 + 4}{10 \cdot (-1)^2} = \frac{40}{10 \cdot 1} = 40 : 10 = \underline{4} \checkmark$$

$$\left(\frac{5}{3} - \frac{7}{4}\right)^2 = \left(\frac{20 - 21}{12}\right)^2 = \left(\frac{-1}{12}\right)^2 = \underline{\frac{1}{144}} \checkmark$$

$$\sqrt{6\frac{1}{4}} \cdot (3^2 - 5) - 7 = \sqrt{\frac{25}{4}} \cdot (9 - 5) - 7 = \frac{5}{2} \cdot \frac{4}{1} - 7 = 10 - 7 = \underline{3} \checkmark$$

$$\sqrt{\frac{0,16}{81}} \cdot \frac{(5-9)^2}{30^2} = \sqrt{\frac{4}{25}} \cdot \frac{(-4)^2}{30^2} = \frac{2}{5} \cdot \frac{4^2}{30^2} = \frac{2}{5} \cdot \frac{16}{900} = \frac{32}{450} = \frac{16}{225} = \frac{1}{14,0625} = \frac{1}{14\frac{1}{16}} = \frac{16}{225} = \frac{16 \cdot 2}{225 \cdot 2} = \frac{32}{450} = \frac{16}{225} = \underline{2\frac{1}{2}} \checkmark$$

$$\sqrt{36 + 64} = \sqrt{100} = \underline{10} \checkmark$$

$$\sqrt{36 + 164} = 6 + 8 = \underline{14} \checkmark$$

$$\sqrt{25 - 16} = \sqrt{9} = \underline{3} \checkmark$$

$$\sqrt{25 - 176} = 5 - 4 = \underline{1} \checkmark$$