1. 次の数の平方根を答えなさい。

(1) 225
$225 = (+15)^2,\ 225 = (-15)^2$

(2) 400
$400 = (+20)^2,\ 40 = (-20)^2$

(3) 256
$256 = (+16)^2,\ 256 = (-16)^2$

(4) $\dfrac{1}{9}$

$\dfrac{1}{9} = \left(+\dfrac{1}{3}\right)^2,\ \dfrac{1}{9} = \left(-\dfrac{1}{3}\right)^2$

(5) $\dfrac{36}{49}$

$\dfrac{36}{49} = \left(+\dfrac{6}{7}\right)^2,\ \dfrac{36}{49} = \left(-\dfrac{6}{7}\right)^2$

(6) 0.01
$0.01 = (+0.1)^2,\ 0.01 = (-0.1)^2$

(1) ± 15	(2) ± 20	(3) ± 16
(4) $\pm\dfrac{1}{3}$	(5) $\pm\dfrac{6}{7}$	(6) ± 0.1

2. 次の数を根号を使わずに表しなさい。

(1) $-\sqrt{36} = -\sqrt{6^2} = -6$

(2) $\sqrt{(-12)^2} = \sqrt{144} = \sqrt{12^2} = 12$

(3) $\sqrt{64} = \sqrt{8^2} = 8$

(4) $-\sqrt{\dfrac{9}{16}} = -\sqrt{\dfrac{3^2}{4^2}} = -\dfrac{3}{4}$

(5) $-\sqrt{(-7)^2} = -\sqrt{49} = -\sqrt{7^2} = -7$

(6) $\sqrt{0.25} = \sqrt{0.5^2} = 0.5$

(7) $\sqrt{0.81} = \sqrt{0.9^2} = 0.9$

(8) $-\sqrt{\dfrac{81}{100}} = -\sqrt{\dfrac{9^2}{10^2}} = -\dfrac{9}{10}$

(9) $\sqrt{\dfrac{25}{36}} = \sqrt{\dfrac{5^2}{6^2}} = \dfrac{5}{6}$

(1) -6	(2) 12	(3) 8
(4) $-\dfrac{3}{4}$	(5) -7	(6) 0.5
(7) 0.9	(8) $-\dfrac{9}{10}$	(9) $\dfrac{5}{6}$

3. 次の数を求めなさい。

(1) $\left(\sqrt{9}\right)^2$
$\sqrt{9} \times \sqrt{9} = 9$

(2) $\left(-\sqrt{25}\right)^2$
$\left(-\sqrt{25}\right) \times \left(-\sqrt{25}\right) = \sqrt{25} \times \sqrt{25} = 25$

(3) $\left(-\sqrt{0.4}\right)^2$
$\left(-\sqrt{0.4}\right) \times \left(-\sqrt{0.4}\right) = \sqrt{0.4} \times \sqrt{0.4} = 0.4$

(1) 9	(2) 25	(3) 0.4