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18-28 even
39-42 all
48-51 all
54 and 55

(18) $x^2 = -11$

$\sqrt{x^2} = \pm\sqrt{-11}$

$x = \pm\sqrt{11 \cdot -1}$

$x = \pm\sqrt{11} \cdot \sqrt{-1}$

$x = \pm\sqrt{11}\, i$

$x = \sqrt{11}\, i$ or $x = -\sqrt{11}\, i$

(20) $2x^2 + 9 = -41$

$-9 \quad -9$

$2x^2 = -50$

$\frac{1}{2}(2x^2) = \frac{1}{2}(-50)$

$x^2 = -25$

$\sqrt{x^2} = \pm\sqrt{-25}$

$x = \pm\sqrt{25} \cdot \sqrt{-1}$

$x = \pm 5i$

$x = 5i$ or $x = -5i$

(22) $-x^2 - 4 = 14$

$+4 \quad +4$

$-x^2 = 18$

$x^2 = -18$

$\sqrt{x^2} = \pm\sqrt{-18}$

$x = \pm\sqrt{18} \cdot \sqrt{-1}$

$x = \pm\sqrt{9} \cdot \sqrt{2} \cdot \sqrt{-1}$

$x = \pm 3\sqrt{2}\, i$

$x = 3\sqrt{2}\, i$ or $x = -3\sqrt{2}\, i$

(24) $3s^2 - 1 = 7s^2$

$-7s^2 \quad -7s^2$

$-4s^2 - 1 = 0$

$+1 \quad +1$

$-4s^2 = 1$

$-\frac{1}{4}(-4s^2) = -\frac{1}{4}(1)$

$s^2 = -\frac{1}{4}$

$\sqrt{s^2} = \pm\sqrt{-\frac{1}{4}}$

$s = \pm\frac{\sqrt{-1}}{\sqrt{4}}$

$s = \pm\frac{i}{2}$

$s = \frac{1}{2}i$ or $s = -\frac{1}{2}i$

(26) $-6(u+5)^2 = 120$

$-\frac{1}{6}(-6(u+5)^2) = -\frac{1}{6}(120)$

$(u+5)^2 = -20$

$\sqrt{(u+5)^2} = \pm\sqrt{-20}$

$u+5 = \pm\sqrt{20}\cdot\sqrt{-1}$

$u+5 = \pm\sqrt{4}\cdot\sqrt{5}\cdot\sqrt{-1}$

$u+5 = \pm 2\sqrt{5}\,i$

$-5 \quad -5$

$u = -5 \pm 2\sqrt{5}\,i$

$u = -5 + 2\sqrt{5}\,i$ or $u = -5 - 2\sqrt{5}\,i$

(28) $9(w-4)^2 + 1 = 0$

$-1 \quad -1$

$9(w-4)^2 = -1$

$\frac{1}{9}(9(w-4)^2) = \frac{1}{9}(-1)$

$(w-4)^2 = -\frac{1}{9}$

$\sqrt{(w-4)^2} = \pm\sqrt{-\frac{1}{9}}$

$w-4 = \pm\frac{\sqrt{-1}}{\sqrt{9}}$

$w-4 = \pm\frac{i}{3}$

$+4 \quad +4$

$w = 4 \pm \frac{1}{3}i$

$w = 4 + \frac{1}{3}i$ or $w = 4 - \frac{1}{3}i$

39) $(-4+7i)+(-4-7i)$

$\boxed{-8}$

40) $(-1-i)+(9-3i)$

$\boxed{8-4i}$

41) $(8+5i)-(1+2i)$

$\boxed{7+3i}$

42) $(2-6i)-(-10+4i)$

$\boxed{12-10i}$

48) $4i(6-i)$

$24i-4i^2$

$24i-4(-1)$

$24i+4$

$\boxed{4+24i}$

(49) $-10i(4+7i)$

$-40i-70i^2$

$-40i-70(-1)$

$-40i+70$

$\boxed{70-40i}$

(50) $(5+i)(8+i)$

$40+5i+8i+i^2$

$40+13i-1$

$\boxed{39+13i}$

(51) $(-1+2i)(11-i)$

$-11+i+22i-2i^2$

$-11+23i-2(-1)$

$-11+23i+2$

$\boxed{-9+23i}$

(54) $(3+10i)^2 = (3+10i)(3+10i)$

$= 9 + 30i + 30i + 100i$

$= 9 + 60i + 100(-1)$

$= 9 + 60i - 100$

$= \boxed{-91 + 60i}$

(55) $(15-8i)^2 = (15-8i)(15-8i)$

$= 225 - 120i - 120i + 64i^2$

$= 225 - 240i + 64(-1)$

$= 225 - 240i - 64$

$= \boxed{161 - 240i}$