Ex 28.10

1) $(a^2+3x)^2 = a^4+6a^2x+9x^2$
2) $(b^2-5y) = b^4-10b^2y+25y^2$
3) $(r^2+4s)^2 = r^4+8r^2s+16s^2$
4) $(m^2-6n)^2 = m^4-12m^2n+36$

Ex 28.11

1) $(c^2+d^2)^2 = c^4+2c^2d^2+d^4$
2) $(m^2-n^3)^2 = m^4+n^6-2m^2n^3$
3) $(z^2+t^3)^2 = z^4+t^6+2z^2t^3$
4) $(p^2-q^2)^2 = p^4+q^4-2p^2q^2$

Ex 28.12

1) $(a^3+3b)^2 = a^6+9b^2+6a^3b$
2) $(4x^2-3c)^2 = 16x^2+9c^2-24x^2c$
3) $(5m^2+3n)^2 = 25m^2+9n^2-30m^2n$
4) $(6p^2-8g^3)^2 = 36p^2+64g^6-96p^2g^3$

Ex 28.13

1) $\left(2\frac{1}{3}a-1\frac{1}{14}b\right)^2 = \left(\frac{7}{3}a-\frac{15}{14}b\right)^2 = \frac{49}{9}a^2+\frac{225}{196}b^2-5ab$
2) $\left(0,9x+1\frac{13}{27}y\right)^2 = \left(\frac{9}{10}+\frac{40}{27}\right)^2 = \frac{81}{100}x+\frac{1600}{729}y+\frac{8}{3}xy$
3) $\left(-1,2x-4\frac{1}{6}y\right)^2 = \left(-\frac{12}{10}x-\frac{25}{6}y\right)^2 = \frac{144}{100}x-\frac{625}{36}y-10xy$
4) $\left(-2,3a+1\frac{2}{23}b\right)^2 = \left(-\frac{23}{10}a+\frac{25}{23}b\right)^2 = \frac{529}{100}a+\frac{625}{529}b-5ab$

Ex 28.14

1) $(80-1)^2 = 6400+1-160 = 6241 = 79^2$
2) $(40-1)^2 = 1600+1-80 = 1521 = 39^2$
3) $(60-1)^2 = 3600+1-120 = 3481 = 59^2$
4) $(70-1)^2 = 4900+1-140 = 4761 = 69^2$

Ex 28.15

1) $(20+1)^2 = 400+1+40 = 441 = 21^2$
2) $(30+1)^2 = 900+1+60 = 961 = 31^2$
3) $(60+1)^2 = 3600+1+120 = 3721 = 61^2$
4) $(90+1)^2 = 8100+1+180 = 8281 = 81^2$

Ex 28.16

1) $(40+2)^2 = 1600+4+160 = 1764 = 42^2$
2) $(60+2)^2 = 3600+4+240 = 3844 = 62^2$
3) $(80+2)^2 = 6400+4+320 = 6724 = 82^2$
4) $(30+2)^2 = 900+4+120 = 1024 = 32^2$

Ex 28.17

1) $(100-2)^2 = 10000+4-400 = 9604 = 98^2$
2) $(30-2)^2 = 900+4-120 = 784 = 28^2$
3) $(90-2)^2 = 8100+4-360 = 7744 = 88^2$
4) $(60-2)^2 = 3600+4-240 = 3364 = 58^2$

Ex 28.18

1) $(12\frac{1}{12})^2 = (\frac{145}{12})^2 = \frac{21025}{144} = 146\frac{1}{144}$
2) $(-7\frac{2}{7})^2 = (\frac{-47}{7})^2 = \frac{2209}{49} = 45\frac{4}{49}$
3) $(7\frac{3}{14})^2 = (\frac{101}{14})^2 = \frac{10201}{196} = 52\frac{9}{196}$
4) $(-13\frac{3}{13})^2 = (\frac{166}{13})^2 = \frac{27556}{169} = 219\frac{9}{169}$

Ex 28.19

1) $(12\frac{12}{13})^2 = (\frac{168}{13})^2 = \frac{28224}{169} = 167\frac{1}{169}$
2) $(14\frac{13}{15})^2 = (\frac{213}{15})^2 = \frac{45369}{225} = 201\frac{144}{225}$
3) $(39\frac{39}{40})^2 = (\frac{1599}{40})^2 = \frac{2556801}{1600} = 1598\frac{1}{1600}$
4) $(15\frac{13}{16})^2 = (\frac{253}{16})^2 = \frac{64009}{256} = 250\frac{9}{256}$

$(1\frac{1}{2})^2 = (\frac{3}{2})^2 = (\frac{9}{4}) = 2\frac{1}{4}$

$1\frac{1}{2} = 1\frac{1}{4}$

$1,5 = 1.25$

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