Name: _____ **Date:**_____

Factorising Quadratic Trinomials: Mixed

Factorise the following:

a) $x^2 + 9x + 14$

____ + ____ = 9

____ × ____ = 14

$x^2 +$ __x + ___$x + 14$

(_____)(_____)

b) $x^2 - 3x - 10$

____ + ____ = -3

____ × ____ = -10

_____

_____

c) $3x^2 - 2x - 5$

_____ × _____ = _____

Coefficient of x^2 Constant term

____ + _____ = -2

____ × ____ = -15

$3x^2 - 2x - 5$

$= 3x^2 +$ _____$x -$ _____$x - 5$

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= ___x(_____) + ____(_____)

= (_____)(_____)

d) $x^2 - 18x + 80$

_____ + _____ = ____

_____ × _____ = ____

_____

_____

e) $2x^2 + 3x - 9$

_____ × _____ = _____
Coefficient of x^2 Constant term

____ + _____ =

____ × ____ =

$2x^2 + 3x - 9$

= _____ (_____) + ___ (_____)

= (_____) (_____)

f) $x^2 - 20x + 100$

_____

_____

_____

_____

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g) $4x^2 + 15x - 25$

h) $x^2 + 2bx + b^2$

i) $6x^2 + 5x - 6$

j) $2x^3 - 14x^2 + 24x$

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k) $-6x^2 - 25x - 25$

_____

_____

_____

_____

l) $x^2 - 6x + 8$

_____

_____

_____

_____

m) $x^2 + 6x + 8$

_____

_____

_____

_____

n) $4x^2 - 4x - 8$

_____

_____

_____

_____

Name: _____ **Date:**_____

o) $9x^2 + 66x + 21$

_____

_____

_____

_____

p) $x^2 - 13x + 40$

_____

_____

_____

_____

q) $4x^2 - 4x + 1$

_____

_____

_____

_____

r) $x^2 + 2x - 24$

_____

_____

_____

_____

Name: _____ **Date:_____**

s) $10x^2 - 13x - 3$

_____

_____

_____

_____

t) $x^2 + 11x + 18$

_____

_____

_____

_____