

Hautanga ā-Ira

HE RAUTAKI WHAKAREA (HAUTEKAU)

4
5
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8

Hei Mahi 1

E ako ana ahau i te rautaki 'te tau māmā me te tikanga paremata' hei whakaoti rapanga e whai wāhi mai ana te tauoti me te tau ā-ira.

Hei tauira:

E tino whaihua ana te rautaki 'te tau māmā me te tikanga paremata' hei whakaoti i ngā rapanga pēnei i te 2.9×4 :

He pātata te 2.9 ki te 3 , ā, he tau māmā te 3 . Nō reira ka whakareatia te 3 ki te 4 (3×4), kātahi ka tango i te 0.1×4 (nā te mea ko te 0.1 te rahinga ake o te 3 i te 2.9):

$$\begin{aligned} 2.9 \times 4 &= (3 \times 4) - (0.1 \times 4) \\ &= 12 - 0.4 \\ &= 11.6 \end{aligned}$$

Ngā tohutohu:

- E whai ake nei ētahi meka whakareatanga. Tuhia kia rua ngā whakareatanga ā-ira e whai pānga ana, kia taea ngā whakareatanga ā-ira te whakaoti mā te whakamahi i te meka whakareatanga, pēnei i te tauira i runga nei.
- Tuhia ngā whakareatanga ā-ira e rua me ngā otinga.

- | | | |
|-----------------|------------------|------------------|
| 1) 3×5 | (2) 5×7 | (3) 7×6 |
| 4) 4×9 | (5) 6×8 | (6) 8×7 |
| 7) 3×9 | (8) 2×8 | (9) 5×6 |

Hei Mahi 2

E ako ana ahau i te rautaki 'te tau māmā me te tikanga paremata' hei whakaoti rapanga e whai wāhi mai ana te tauoti me te tau ā-ira.

Ngā tohutohu:

Whakamahia te rautaki o Hei Mahi 1 (te tau māmā me te tikanga paremata) hei whakaoti i ngā whakareatanga ā-ira nei:

- | | | |
|-------------------|--------------------|--------------------|
| 1) 3×6.8 | (2) 2×7.9 | (3) 4×5.9 |
|-------------------|--------------------|--------------------|

- | | | |
|------------------------------|------------------------------|------------------------------|
| 4) 6×5.9 | (5) 8×3.8 | (6) 7×6.2 |
| 7) 5×7.1 | (8) 9×4.9 | (9) 4×11.2 |
| 10) 3×10.1 | (11) 5×4.9 | (12) 6×10.2 |
| 13) 2×15.2 | (14) 7×9.9 | (15) 8×11.2 |
| 10) $9.99 + \square = 15.48$ | (11) $2.98 + \square = 8.46$ | (12) $5.93 + \square = 9.71$ |

Hei Mahi 3

E ako ana ahau i te rautaki 'te wāwāhi uara tū' hei whakaoti rapanga e whai wāhi mai ana te tauoti me te tau ā-ira.

Hei tauira:

E tino whaihua ana te rautaki 'te wāwāhi uara tū' hei whakaoti i ngā rapanga pēnei i te 3.2×4 :

Ka wāwāhia te 3.2 ki ōna wahanga uara tū, arā, te 3 me te 0.2. Ka whakareatia ia wāhanga ki te 4:

$$\begin{aligned} 3.2 \times 4 &= (3 \times 4) + (0.2 \times 4) \\ &= 12 + 0.8 \\ &= 12.8 \end{aligned}$$

Ngā tohutohu:

Whakamahia te rautaki i runga nei hei whakaoti i ēnei rapanga:

- | | | | |
|--------------------|----------------------|-----------------------|------------------------|
| 1) 2×4.2 | (2) 3×2.2 | (3) 4×1.2 | (4) 4×3.2 |
| 5) 6×5.1 | (6) 8×7.1 | (7) 2×8.4 | (8) 3×6.3 |
| 9) 3×10.2 | (10) 4×12.2 | (11) 4×103.2 | (12) 3×1123.3 |
- 13) Whakawhitiwhiti kōrero mō ngā āhuatanga ōrite o ngā rautaki e rua nei?
- te tau māmā me te tikanga paremata
 - te wāwāhi uara tū
- | | | | |
|---------------------|----------------------|----------------------|----------------------|
| 14) 5×11.1 | (15) 7×31.1 | (16) 4×42.2 | (17) 3×52.3 |
|---------------------|----------------------|----------------------|----------------------|
- 18) Me pēhea te whakamahi i te rautaki 'te wāwāhi i ngā uara tū' hei whakaoti i ngā rapanga pēnei i te 2×1234.5 ?

Hei Mahi 4

Hei tauira:

Ko tā Mereana hei whakaoti i te whakareatanga 1.4×3 , he whakarea i te 1 ki te 3, ka 3, he whakarea i ngā 4 hautekau ki te 3, ka 12 hautekau. He ōrite te 12 hautekau ki te 1.2, nō reira:

$$\begin{aligned} 1.4 \times 3 &= (1 \times 3) + (0.4 \times 3) \\ &= 3 + 1.2 \\ &= 3 + 1 + 0.2 \\ &= 4.2 \end{aligned}$$

Ngā tohutohu:

Whakamahia te rautaki a Mereana hei whakaoti i ngā whakareatanga e whai ake nei:

- | | | | |
|-------------------|---------------------|---------------------|---------------------|
| 1) 4×3.4 | (2) 6×5.4 | (3) 3×2.6 | (4) 2×1.7 |
| 5) 7×1.3 | (6) 5×3.2 | (7) 8×1.4 | (8) 3×3.4 |
| 9) 5×2.7 | (10) 7×2.6 | (11) 4×2.9 | (12) 6×4.3 |

Hei Mahi 5

Ngā tohutohu:

Āta whakaarohia te rautaki e tino whaihua ana hei whakaoti i ngā whakareatanga nei. Tuhia ngā hīkoi katoa o te rautaki:

- | | | | |
|---------------------|---------------------|---------------------|----------------------|
| 1) 4×6.4 | (2) 6×7.9 | (3) 3×10.8 | (4) 2×15.9 |
| 5) 7×8.9 | (6) 5×7.6 | (7) 8×9.8 | (8) 8.7×3 |
| 9) 6.4×5 | (10) 7.3×7 | (11) 8.2×4 | (12) 5.8×6 |
| 13) 9×8.8 | (14) 8.8×2 | (15) 6.3×9 | (16) 5×7.9 |
| 17) 9×11.4 | (18) 7.6×8 | (19) 3×9.9 | (20) 8×10.6 |
| 21) 2×15.3 | (22) 7×9.5 | (23) 4×5.9 | (24) 6×8.4 |

Hautanga ā-Ira
HE RAUTAKI WHAKAREA (HAUTEKAU)
NGĀ OTINGA

Hei Mahi 1

He taurira whakautu:

- | | | |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1) $3 \times 4.9 = 14.7$
$3 \times 4.8 = 14.4$
$3 \times 5.1 = 15.3$
$3 \times 5.2 = 15.6$ | (2) $5 \times 6.9 = 34.5$
$5 \times 6.8 = 34$
$5 \times 7.1 = 35.5$
$5 \times 7.2 = 36$ | (3) $7 \times 5.9 = 41.3$
$7 \times 5.8 = 40.6$
$7 \times 6.1 = 42.7$
$7 \times 6.2 = 43.4$ |
| 4) $4 \times 8.9 = 35.6$
$4 \times 8.8 = 35.2$
$4 \times 9.1 = 36.4$
$4 \times 9.2 = 36.8$ | (5) $6 \times 7.9 = 47.4$
$6 \times 7.8 = 46.8$
$6 \times 8.1 = 48.6$
$6 \times 8.2 = 49.2$ | (6) $8 \times 6.9 = 55.2$
$8 \times 6.8 = 54.4$
$8 \times 7.1 = 56.8$
$8 \times 7.2 = 57.6$ |
| 7) $3 \times 8.9 = 26.7$
$3 \times 8.8 = 26.4$
$3 \times 9.1 = 27.3$
$3 \times 9.2 = 27.6$ | (8) $2 \times 7.9 = 15.8$
$2 \times 7.8 = 15.6$
$2 \times 8.1 = 16.2$
$2 \times 8.2 = 16.4$ | (9) $5 \times 5.9 = 29.5$
$5 \times 5.8 = 29$
$5 \times 6.1 = 30.5$
$5 \times 6.2 = 31$ |

Hei Mahi 2

- | | | |
|----------|-----------|-----------|
| 1) 20.4 | (2) 15.8 | (3) 23.6 |
| 4) 35.4 | (5) 30.4 | (6) 43.4 |
| 7) 35.5 | (8) 44.1 | (9) 44.8 |
| 10) 30.3 | (11) 24.5 | (12) 61.2 |
| 13) 30.4 | (14) 69.3 | (15) 89.6 |

Hei Mahi 3

- | | | |
|-----------|------------|-------------|
| 1) 8.4 | (2) 6.6 | (3) 4.8 |
| 4) 12.8 | (5) 30.6 | (6) 56.8 |
| 7) 16.8 | (8) 18.9 | (9) 30.6 |
| 10) 48.8 | (11) 412.8 | (12) 3369.9 |
| 14) 55.5 | (15) 213.7 | (16) 168.8 |
| 17) 156.9 | | |

- 18) He māmā noa iho te $1234 \times 2 = 2468$. Mēnā, ko te 1234.5×2 ko te kotahi te otinga o te 0.5×2 , nō reira ka tāpirihia tērā ki te 2468, arā, ko te 2469 te otinga.

Hei Mahi 4

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|-----------|-----------|-----------|
| 1) 13.6 | (2) 32.4 | (3) 7.8 |
| 4) 3.4 | (5) 9.1 | (6) 16 |
| (7) 11.2 | (8) 10.2 | (9) 13.5 |
| (10) 18.2 | (11) 11.6 | (12) 25.8 |

Hei Mahi 5

- | | | |
|----------|------------|-----------|
| 1) 25.6 | (2) 47.4 | (3) 32.4 |
| 4) 31.8 | (5) 62.3 | (6) 38 |
| 7) 78.4 | (8) 26.1 | (9) 32 |
| 10) 51.1 | (11) 32.8 | (12) 34.8 |
| 13) 79.2 | (14) 17.6 | (15) 56.7 |
| 16) 39.5 | (17) 102.6 | (18) 60.8 |
| 19) 29.7 | (20) 84.8 | (21) 30.6 |
| 22) 66.5 | (23) 23.6 | (24) 50.4 |