ML8 Chapter 3 Problems of the Week Answers

BLM 3–4 Chapter 3 Problems of the Week

1. Jill and Phil can make a right triangle.

2. a)

Decimal Value of Mixed Number	Value of Square Root
$4\frac{1}{9}$ = 4.111111111 …	$\sqrt{17}$ = 4.123105626 …
$4\frac{2}{9}$ = 4.222222222 …	$\sqrt{18}$ = 4.242640687 …
$4\frac{3}{9}$ = 4.333333333 …	$\sqrt{19}$ = 4.358898944 …
$4\frac{4}{9}$ = 4.44444444 …	$\sqrt{20}$ = 4.472135955 …
$4\frac{5}{9}$ = 4.555555555 …	$\sqrt{21}$ = 4.582575695 …
$4\frac{6}{9}$ = 4.666666666 …	$\sqrt{22}$ = 4.69041576 …
$4\frac{7}{9}$ = 4.777777777 …	$\sqrt{23}$ = 4.795831523 …
$4\frac{8}{9}$ = 4.888888888 …	$\sqrt{24}$ = 4.898979486 …

The value of the mixed number is close to the value of the square root above it on the number line.

b) $\sqrt{32} \approx 5\frac{7}{11}$; $5\frac{7}{11}$ = 5.636363636 … ;

$\sqrt{32}$ ≈ 5.656854249 …

3. $(15 - 9)^2 + 8^2 = AB^2$

$6^2 + 8^2 = AB^2$

$36 + 64 = AB^2$

$100 = AB^2$

$\sqrt{100} = AB$

$10 = AB$

The length of AB is 10 cm.

4. 13 m

5. 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225, 196, 169, 144, 121, 100, 81, 64, 49, 36, 25, 16, 9, 4, 1

6. 7.21 m