

3.) $(b^2 + 5b + 6) \div (b + 3)$

Long Division

answer $b + 2$

b	b^2	$+5b$	$= 5b \checkmark$
+3	$+3b$	$+6$	

$$\begin{array}{r} b+3 \overline{) b^2+5b+6} \\ \underline{\ominus b^2+3b} \\ 2b+6 \\ \underline{\ominus 2b+6} \\ 0 \end{array}$$

5.) $(m^2 - 8m + 7) \div (m - 1)$

answer $m - 7$

m	m^2	$-7m$	$= -8m \checkmark$
-1	$-1m$	$+7$	

7.) $\frac{y^2 + 21y + 68}{y + 17}$

answer $y + 4$

y	y^2	$+4y$	$= 21y \checkmark$
+17	$+17y$	$+68$	

9.) $(3a^2 - 8a + 4) \div (3a - 2)$

answer $a - 2$

3a	$3a^2$	$-6a$	$= -8a \checkmark$
-2	$-2a$	$+4$	

11.) $\frac{10y^2 - y - 24}{2y + 3}$

answer $5y - 8$

2y	$10y^2$	$-16y$	$= -1y \checkmark$
+3	$+15y$	-24	

56.

descending order

13.) $(x^2 + 17x + 66) \div (x + 6)$

↙ quotient

	$x \quad + 11$		
x	x^2	$+ 11x$	$= 17x$ ✓ middle term
$+ 6$	$+ 6x$	$+ 66$	

15.)

↙ answer
long division

$x - 7$)	$x^2 - 4x - 21$	
		$\ominus x^2 + 7x$	↓
		$3x - 21$	
		$\ominus 3x + 21$	↓
		0	

16.)

$A = lw$
 $x^2 - 8x - 9 = (x + 1)(w)$

↙ width ↙ answer

	$x \quad - 9$		
x	x^2	$= 9x$	$= -8x$ ✓
$+ 1$	$+ 1x$	$- 9$	