

1(a)

$$4k + k + 4k + 9k = 1, k = \frac{1}{18}$$

x	-2	1	2	3
$P(X = x)$	$\frac{4}{18}$	$\frac{1}{18}$	$\frac{4}{18}$	$\frac{9}{18}$

1(b)

$$[E(X) = 28k =] \frac{14}{9}, 1.56$$

1(c)

$$P(X \neq 2 | X > 0) = \frac{\frac{10}{18}}{\frac{14}{18}}$$

$$= \frac{5}{7}, 0.714$$