What about other random variables that take on exactly two values. If the values are not 0, 1, then the random is not Bernoulli, but we can use Bernoulli random variables to understand them.

For instance, $Y = 9$ with probability p
5 with probability $q = 1-p$

then Y and $9X + 5(1-X)$ have the same distribution, where here X is Bernoulli(p).

$$Y = 9X + 5(1-X)$$
$$= 9 \text{ if } X = 1$$
$$= 5 \text{ if } X = 0$$

Now we can explore the properties of Y using what we know about X.

E.g. $E(Y) = E(9X + 5(1-X)) = E(9X + 5 - 5X)$
$= E(4X+5) = 4E(X) + 5$
$= 4p + 5$

Another similar example:

Say $Y = 7$ with probability p
$= -3$ with probability $q = 1-p$

Might as well write $Y = 7X + (-3)(1-X)$ where X is Bernoulli(p).

e.g. $E(Y) = E(7X + (-3)(1-X))$
$= E(7X - 3 + 3X)$
$= E(10X - 3)$
$= 10E(X) - 3$
$= 10p - 3$

$\mathrm{Var}(Y) = \mathrm{Var}(7X + (-3)(1-X))$
$= \mathrm{Var}(10X - 3)$
$= 10^2 \mathrm{Var} X$
$= 100 \cdot p \cdot q$