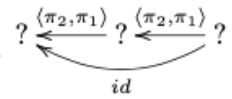


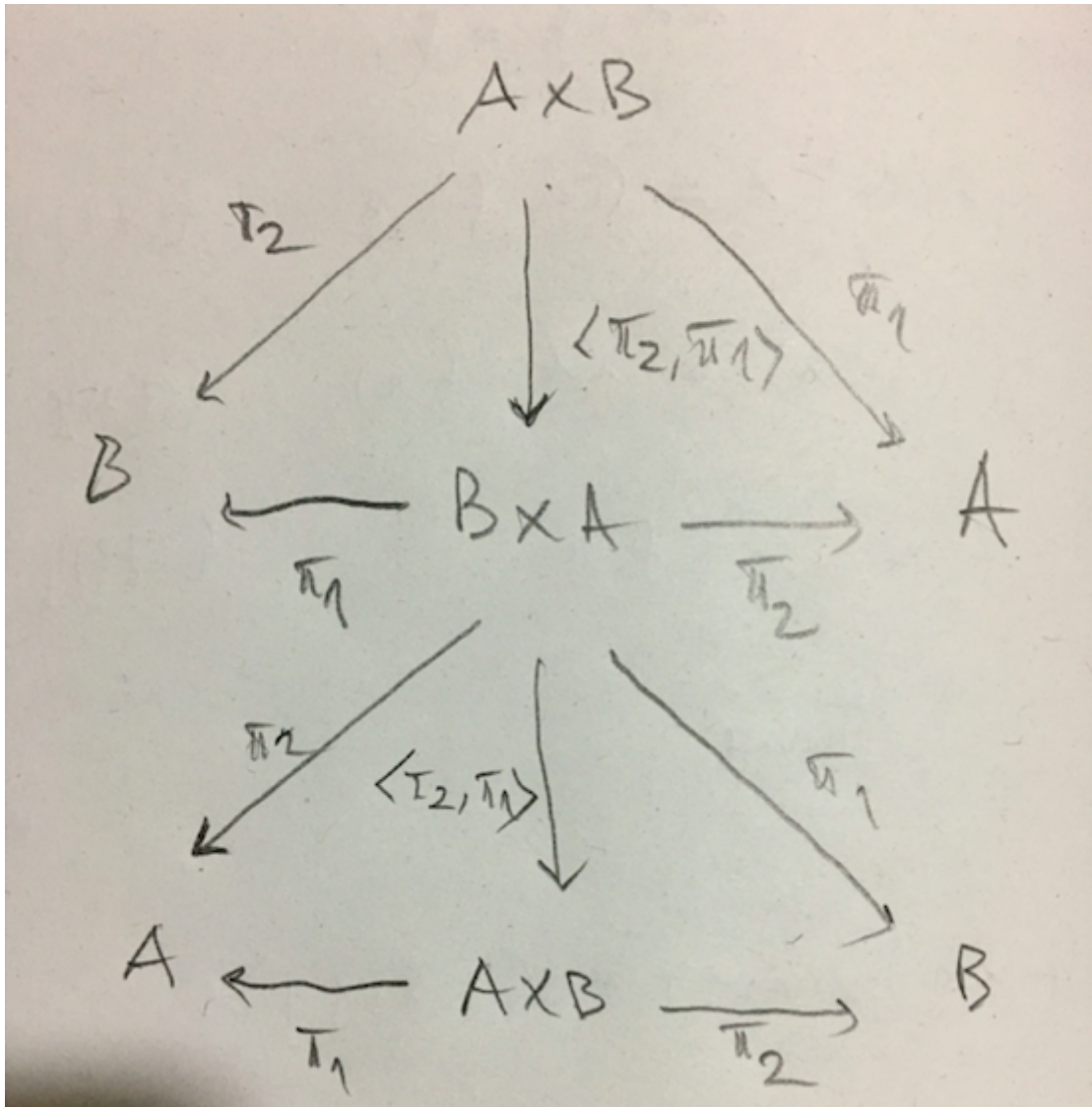
3. Preencha da forma mais genérica possível os “?” do diagrama



### Resolução

Da direita para a esquerda:

- $? = A \times B$
- $? = B \times A$
- $? = A \times B$



In [1]:

```
p1 = fst
p2 = snd
split f g x = (f x, g x)

-- type checking

:t split p2 p1
:t split p2 p1 . split p2 p1

-- testing with (x,y) = (2,3)

((split p2 p1) . (split p2 p1)) (2,3) == id (2,3)
```

```
split p2 p1 :: forall b1 b2. (b1, b2) -> (b2, b1)
```

```
split p2 p1 . split p2 p1 :: forall b1 b2. (b1, b2) -> (b1, b2)
```

```
True
```

In [3]:

```
-- applying
```

```
split p2 p1 . split p2 p1 $ (2,3)
```

```
(2,3)
```